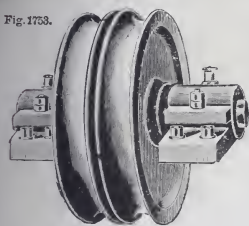


SWIFT'S PILE DRIVER, WINDLASS AND SIDEWALK HOIST.

DOUBLE SHEAVE.
Shaft and Bearings.



12 inch, per set.....	\$20.00	CAPACITY for 1,500 lb. Hammer, Price.....	\$15.00
14 " " " ".....	23.00	" " " " " ".....	20.00
16 " " " ".....	27.00	" " " " " ".....	25.00

SIDEWALK ELEVATOR.

Will raise 2,000 lbs. from 10 to 20 feet by Hand Power.



Fig. 1758.

Elevator, less slides	\$140.00
Winding Machine and Sheaves	100.00
Winding Machine	90.00

**FOR CONTRA
NIPPER.
For Horse or Hand Pile Driver.**

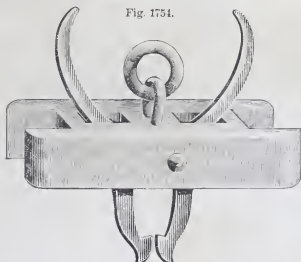


Fig. 1754.

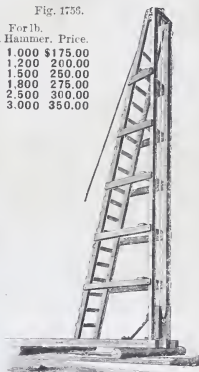
, RAILROAD AND SHIPYARD,
 PILE DRIVER PILE DRIVING DERRICK.
 HAMMER.



Fig. 1755.

Price per lb. 6c.

	For lb.	
Ft.	Hammer.	Price.
25	1.000	\$175.00
30	1.200	200.00
35	1.500	250.00
40	1.800	275.00
45	2.500	300.00
50	3.000	350.00



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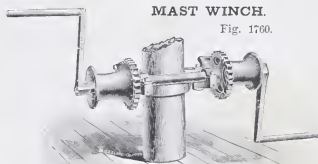


Fig. 1760

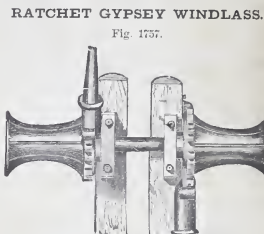
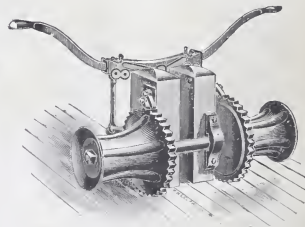


Fig. 1757

PUMP BRAKE RATCHET.
Gypsy Windlass.



Diameter of Head, Inches.	Length of Head, Inches.	Price, Fig. 1757.	Price, Fig. 1761.
4½	5	\$10.00	\$25.00

Larger Sizes Quoted upon Application.

ASH LIFT.
Will Raise 800 Lbs.

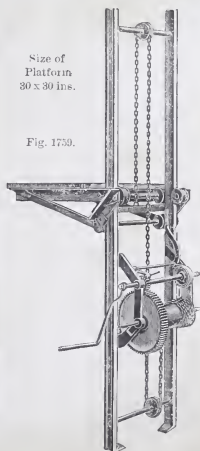


Fig. 1759.

Size of
Platform
30 x 30 ins.

Complete Set Up.
\$100.00
125.00

CRANK CAPSTAN.



Fig. 1752

All sizes and styles of Windlasses, Capstans, Winches, etc., quoted upon application. Price as to size and style wanted.

POWER CAPSTAN.



Fig. 1763.

SWIFT'S BELL BASE, TELESCOPIC, HOUSE-RAISING and COTTON SCREW JACKS.

LOCOMOTIVE JACK.
Fig. 1761.



CHEESE PRESS SCW.
Fig. 1774.



Fig. 1776.



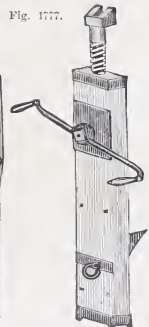
CAR-BOX JACK.
Fig. 1765.



CAST IRON JACK SCREW
Fig. 1775



Fig. 1777.



WAGON JACK SCREW.
Fig. 1766.



FLAT BOTTOM JACK.
Fig. 1767.



SUGAR AND COTTON SCREW JACK.
Fig. 1778.



BELL BASE RATCHET SCREW JACK.
Fig. 1769.



FISHPRESS SCREW.
Fig. 1768.



Diameter of Screw, 3/4 inches. Barrel 16 ins. Price, \$12.

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Special Low Prices.

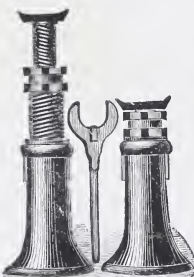
DONEGAN AND SWIFT,
6 MURRAY STREET,
NEW YORK.

Diameter of Screws, Length.	Price Fig. 1776.	Price Fig. 1777.	Price Fig. 1778.	Price Fig. 1779.
2 x 24 ins.	\$20.00	\$24.00	\$18.00	
2 x 30 "	\$19.00	22.00	25.00	19.00
2 x 33 "	19.50	23.00		19.50
2 x 36 "	20.00	24.00	26.00	20.00
2 x 39 "		29.00		
2 x 33 "		32.00		
2 x 35 "				
2 x 42 "	28.00	36.00	28.00	
2 x 35 "		50.00	45.00	
2 x 42 "		55.00	48.00	
2 x 48 "		60.00	52.50	

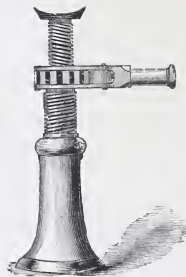
Price given is for Jack complete, with Crank.

TELESCOPIC JACKS.

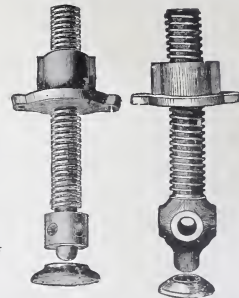
WITH DOUBLE ACTING SCREWS.
Fig. 1770.



WITH RATCHET LEVER.
Fig. 1771.



HOUSE-RAISING SCREW JACKS.
Wrought Iron. Cast Iron.
Fig. 1772. Fig. 1773.



Height of Base.	Height, Closed.	Net Rise.	Price, Fig. 1770.	Price, Fig. 1771.
7 1/2 in.	10 in.	11 in.	\$15.00	\$25.00
10 "	14 "	16 "	18.00	30.00
13 1/4 "	17 "	23 "	22.00	32.00
18 "	21 "	31 "	25.00	35.00
22 "	25 "	36 "	30.00	40.00

SUGAR AND COTTON SCREW JACK.
Fig. 1779.



Diameter of Screw, Over all Inches.	Height of Screw, Inches.	Price Fig. 1765.	Price Fig. 1766.	Price Fig. 1767.	Price Fig. 1768.	Price Fig. 1769.	Price Fig. 1770.	Price Fig. 1771.	Price Fig. 1772.	Price Fig. 1773.
1 1/4	8	\$3.10								
1 1/4	12	3.80								
1 1/4	12	4.75	\$4.75							
1 1/4	18	6.75	5.75	\$5.25					\$7.25	
1 1/4	24			6.75					8.00	
1 1/4	12	5.75	5.50						\$4.80	
1 1/4	18	7.50	6.75	6.75					5.70	8.40
2	12	6.00	6.50		\$4.25	\$16.00	6.00			
2	16	7.50	8.00		5.75	17.50	6.80	10.75		
2	20	10.25	8.75			19.00	7.60	11.25		
2	24	12.50				20.50	8.40	12.25		
2	30	13.50				23.50	9.60	13.75		
2 1/4	30	11.00	11.50			22.00	9.30			
2 1/4	30	15.75				27.00	11.50			
2 1/4	40						13.60			
2 1/4	20	13.25	13.75		10.75	23.50	10.80			
2 1/4	36	26.00				35.00	14.90			
2 1/4	21					30.00	16.40			
2 1/4	33					40.00	21.30			
2 1/4	34	23.25				35.00	19.20		\$4.00	
3	24	30.00				40.00	21.60		4.75	
3	36					48.00	24.00		5.50	
3	48						28.80			

Prices for Sizes not found in this Table, quoted upon application.

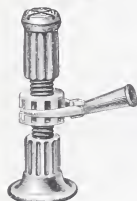
DONEGAN AND SWIFT, - 6 MURRAY STREET, NEW YORK.

SWIFT'S LEVER and SCREW JACK,

FOR CONTRACTOR AND RAILROAD.

**DOUBLE MOVEMENT
BOX SCREW JACK.**

Fig. 1786.



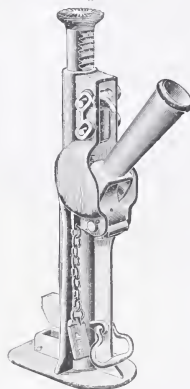
**TRIP JACK.
For Track Work.**

Fig. 1787.



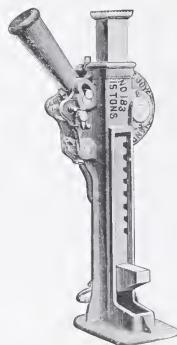
**TOOTHED TRIP TRACK
JACK.**

Frame and Lever Malleable Iron.
Fig. 1788.



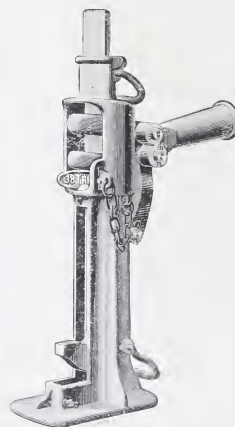
**GEARED JACK.
Automatic Movement.**

Fig. 1789.



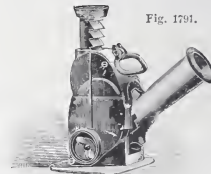
TOGGLE TRIP TRACK JACK.

Fig. 1790.



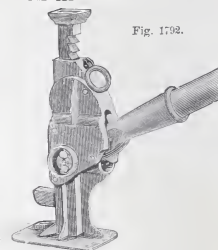
**LOWERING JACK.
Automatic, with Rack.**

Fig. 1791.



TRACK AND BRIDGE JACK.

Fig. 1792.



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**RAPID MOVEMENT SCREW
JACK, WITH LIFT CLAW.**

Fig. 1793.

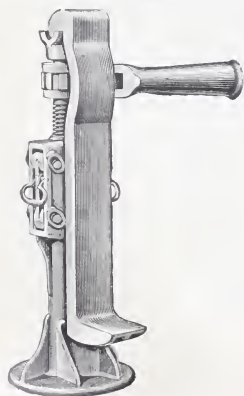
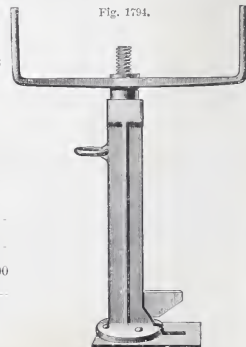


Figure No.	1786			1787			1788			1789			1790			1791			1792			1793			1794		
Capacity.....tons	8	8	25	4	10	5	10	20	25	5	10	10	10	12	15	50	12										
Height of Jack when down.....inches	13	16	16	19	27	22½	28½	27	33	23½	25½	11	20½	26½	20½	29	18										
Rise of Screw.....inches	7	10	9													14											
Rise of Bar.....inches				9	16	10½	16	18	22½	11¼	12	5	10	15	14												
Diameter of Screw.....inches	2	2	2½													3	1½										
Diameter of Bar.....inches				1½	1¾	1½	2			1½	1¾																
Weight of Jack, lbs.	20	33	47	39	81	44	80	150	183	62	86		63	80	95	164											
Price.....	8	15.00	25.00	35.00	16.00	23.00	15.00	26.00	50.00	55.00	15.00	20.00	20.00	25.00	30.00	35.00	75.00	13.00									

**TRACK JACK, WROUGHT
IRON.**

Fig. 1794.

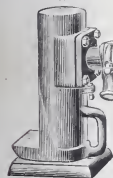


DONEGAN AND SWIFT, 6 MURRAY STREET, NEW YORK

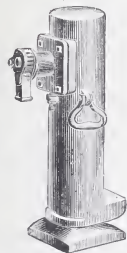
SWIFT'S BALL-BEARING RATCHET SCREW JACK

FOR CONTRACTOR, RAILROAD AND SHIPYARD.

10-TON CONE-BEARING SQUARE BASE
Fig. 1795.



15-TON, WITH FOOT LIFT
Fig. 1796.



DOUBLE-SPEED, WITH GROUND LIFT
Fig. 1797.



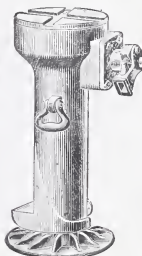
25-TON, WITH HOOP FOR GROUND LIFT
Fig. 1798.



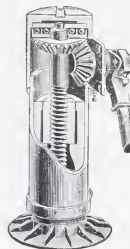
35-TON ROUND BASE
Fig. 1799.



50-TON BRIDGE JACK
Fig. 1800.



SHOWING SECTION VIEW OF OUR BALL BEARING JACKS
Fig. 1800-a.



CAR-REPLACING JACK
Works at an angle with the same force as if working perpendicular
Fig. 1801.



JOURNAL JACK
Has a Powerful Short Lift.
Fig. 1795-a.

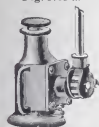
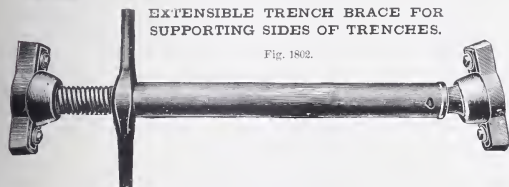


Figure No.	1795				1795-a				1796		1797	1798		1799		1800		1801
Capacity.....ions	10	10	8	8	10	15	15	15	15	25	25	35	35	*40	50	60	70	50
Height.....inches	14	20	7	10	11	11	22	22	24	30	26	26	31	21½	27	26	36	28
Rise.....inches	10	10	3	5	5	5	11	11	10	9	13	13	18	10	13	12	12	14
Weight.....lbs	40	60	17	21	40	45	80	85	115	55	105	165	190	180	200	300	300	85
Price	\$22.00	24.00	18.00	18.00	30.00	22.00	25.00	30.00	60.00	\$3.00	90.00	125.00	155.00	140.00	150.00	175.00	200.00	60.00
																		per pair.

See that Socket Bearing Head and Foot.

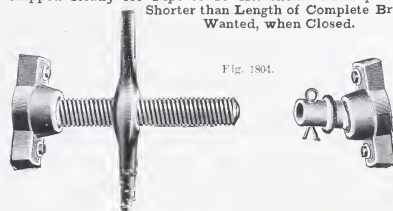
Write for Our Special Low Prices.

DONEGAN AND SWIFT,
6 MURRAY ST.,
New York.



EXTENSIBLE TRENCH BRACE FOR SUPPORTING SIDES OF TRENCHES.
Fig. 1802.

EXTENSIBLE BRACE FITTINGS
Shipped Ready for Pipe to be Attached. Cut Pipe 7 in. Shorter than Length of Complete Brace Wanted, when Closed.



Inches Long, when closed.	Price per doz. Fig. 1802.	Price per doz. complete. Fig. 1804.
12		\$30.00
14		31.00
16	\$23.00	22.00
18	21.00	23.00
21	24.00	
24	24.00	
27	26.00	
30	26.00	
36	27.00	
42	28.00	
48	29.00	
60	55.00	

RATCHET PULLING JACK
A Very Popular Device for Car Houses. Also in Use by Bridge Builders, Iron Workers, etc. Made in 2 Sizes.

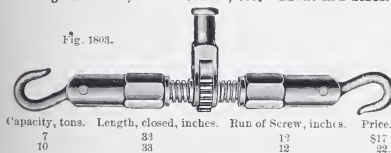


Fig. 1803.

Capacity, tons.	Length, closed, inches.	Run of Screw, inches.	Price.
7	83	13	\$17.50
10	93	12	22.50

FITTINGS FOR COMBINED SCREW AND TIMBER BRACE
Fig. 1805.



Size of Screw, inches.	Price, per doz. sets.
1 1/2 x 14	\$18.00
1 3/4 x 18	22.00
2 x 18	38.00

When required we can furnish caps for the butt end of brace.

DONEGAN AND SWIFT, 6 MURRAY STREET, NEW YORK.

SWIFT'S HYDRAULIC JACK

FOR CONTRACTOR, RAILROAD AND SHIPYARD.

"PLAIN,"

Fig. 1806.



"BROAD BASE,"

Fig. 1807.



"CLAW,"

Fig. 1808.



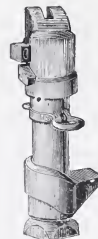
"LARGE ROUND BASE
AND CLAW."

Fig. 1809.



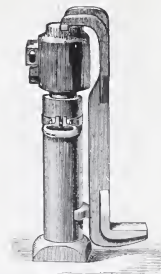
"HOOK HEAD
CLAW."

Fig. 1810.



"INDEPENDENT
CLAW."

Fig. 1811.



"SWIVEL CLAW."

Capacity, 7 tons. Height, 13 in.

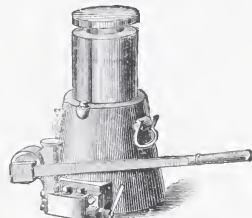
Raise, 5 in. Price, \$40.00.

Fig. 1812.



"OUTSIDE PUMP" VERTICAL
HYDRAULIC JACK.

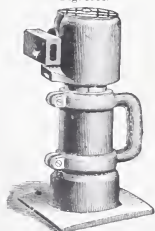
With Extra Large Valves.
Fig. 1813.



"HYDRAULIC JOURNAL BOX"
HYDRAULIC JACK.

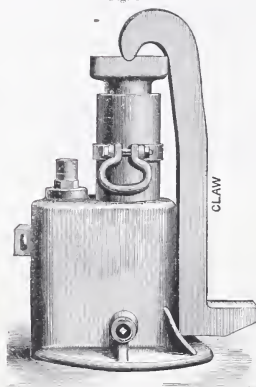
Base Style.

Fig. 1814.



"LOW HYDRAULIC JACK,"
Vertical or Horizontal Lift.

Fig. 1815.



G. KIRKHAM

DONEGAN AND SWIFT, 6 MURRAY STREET, NEW YORK.

PRICE. — Fig. 1811.

Capacity, Tons.	Raise, Inches.	Fig. 1806.	Fig. 1807.	Fig. 1808.	Fig. 1809.	Fig. 1810.	Plain Style.	Base Style.	Horizontal Style.	Fig. 1813.	Fig. 1814.	Fig. 1815.
4	3	\$40	\$45								\$10	
4	12	50	56	\$58		\$58						
7	3	46	50									
7	12	56	64	68		68	\$54	\$72	\$68		46	
7	18	60	67	70		72	70	77	75			
7	24	64	70	72								
10	12	64	76	80	\$100	80	74	86	78			\$80
10	18	72	88	90		90						
10	22	78	96									
10	24	80	100									
15	12	80	100	120	140		92	115	98			100
15	18	92	130	135			107	135	113			130
15	22	100	135									140
20	12	96	120	160	185		120	135	128			120
20	18	115	140	180			145	160	155			150
20	22		150									165
20	24		160									
30	9	120	132									
30	12	140	160	200			160	185	170			150
30	18		200									175
30	22		225									210
40	12	160	180									
40	18		220									
45	12											175
45	18											225
60	9											185
80	12									\$300		235
100	9									275		225
100	12									300		275

Prices of Heavier Jacks, Style Fig. 1808, given upon application.
Special lengths made to order at price of next longer length.

DONEGAN AND SWIFT, - - - 6 MURRAY STREET, NEW YORK.

SWIFT'S WATER TANK VALVE and FIXTURES FOR RAILROAD WATER STATIONS.

LIFT VALVE, Iron Pipe, Galvanized Spout and Fixtures.

PISTON VALVE, with Elastic Seat and Cage, Iron Pipe, Galvanized Spout, Bell-Mouth, and Fixtures.

LEATHER-FACED VALVE, Hinged and Fixtures.

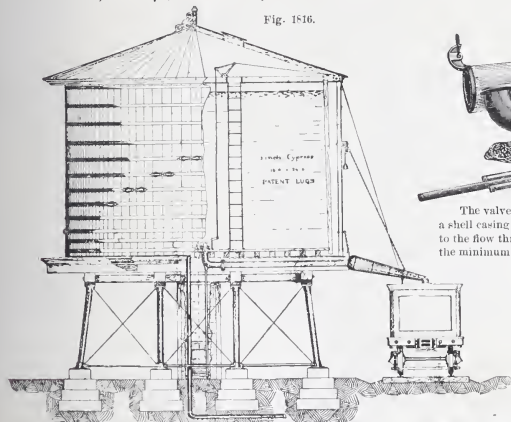


Fig. 1816.

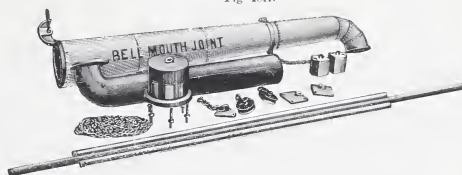


Fig. 1817.

The valve is of the piston type, provided with an elastic seat, and is fitted into a shell casing (with side openings), which serves as a guide. The resistance due to the flow through the contracted opening, as valve is being raised, is reduced to the minimum by the supply of air through the tube referred to at the top of the flow.

Size of Pipe, 6 inches.....	Price \$50.00
" " 7 "	" 60.00
" " 8 "	" 70.00

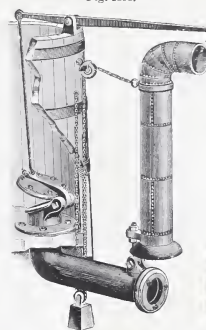


Fig. 1818.

Size.	Price.
6-inch	\$48.00
7 "	58.00
8 "	65.00

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Our Special
Low Prices.*

**DONEGAN AND
SWIFT,**
6 Murray Street,
New York.

SWIFT'S UNIVERSAL BALL-and-SOCKET JOINT PIPE, with Lift Valve and Galvanized Iron Spout and Fixtures.

LIFT VALVE, Iron Pipe, Galvanized Spout and Fixtures, Frost-proof.

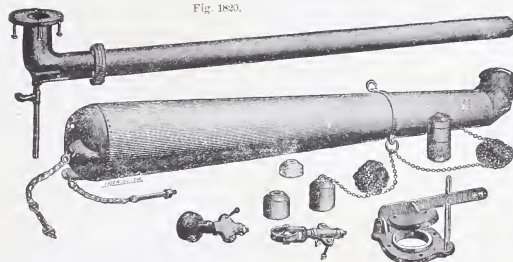


Fig. 1820.

Fixtures for 16-foot diameter Tank.....		6-in. Pipe, \$65.00	7-in. Pipe, \$75.00
" 20	"	70.00	80.00
" 24	"	75.00	85.00
" 30	"	82.50	92.50

FIG. 1820.

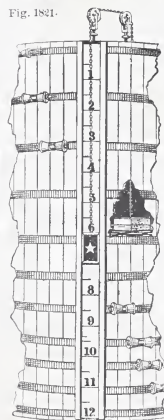


Fig. 1821.

TANK GAUGE.

Is laid off in feet and decimals of a foot, white background, 3 inch figures painted in black.

FIG. 1821.

For Tanks,	Price.
6 ft. and less, \$	8.00
7 " to 8 ft.	10.00
9 " " 10 "	11.00
11 " " 14 "	12.00
15 " " 18 "	16.00
19 " " 20 "	20.00
21 " " 24 "	25.00
25 " " 26 "	30.00

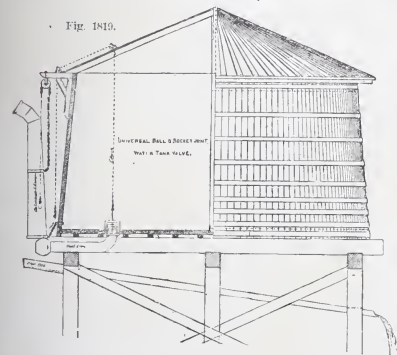


Fig. 1819.

The Ball-and-Socket Joint prevents the breaking of Pipe Connections, as in the ordinary method. Size, 8-inch Pipe; Rubber Valve and all Fittings, complete: Price \$90.00.

DONEGAN AND SWIFT.
6 Murray Street, - - - NEW YORK.

SWIFT'S TRACK GAUGE, LEVEL BARS and SPIKE PULLER,

FOR CONTRACTOR AND RAILROAD.

TRACK GAUGE AND LEVEL, WITH SQUARING ATTACHMENT.

Standard gauge, 4 ft. 8½ inches. Price \$4.00 each. Made for tracks of any desired gauge.

Fig. 1822.



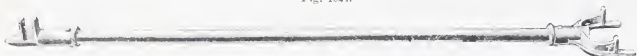
TRACK LEVEL, WOOD BAR, IRON SHOD.
With Spirit Glass set on side or top. Price \$3.25 each.

Fig. 1833.



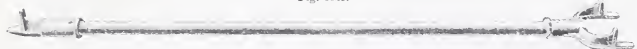
TRACK GAUGE, WITH GUARD-RAIL ATTACHMENT. Price \$3.50 each.

Fig. 1824.



STANDARD TRACK GAUGE. 4 feet 8½ inches. Price \$3.00 each.

Fig. 1835.



CROW BARS, SOLID CAST STEEL.

PINCH POINT. Weight 10 to 40 lbs. Price per lb. 12c.

Fig. 1826.



WEDGE POINT.

Fig. 1827.



LINING BAR.

Weight 18 to 25 lbs. Price per lb. 12c.

Fig. 1828.



SOLID CAST STEEL.

TAMPING BAR.

Weight 14 lbs. Price per lb. 16c.

Fig. 1829.



RAILROAD CLAW BAR WITH HEEL, SOLID CAST STEEL. Weight 25 lbs. Price per lb. 22c.

Fig. 1831.



SHACKLE BARS, WITH CAST STEEL SHACKLE. Length 5 ft. Price \$6.00 each.

Fig. 1830.



RAILROAD TRACK TONGS.

Weight 17 lbs. Price per lb. 30c.

Fig. 1832.



WRITE FOR OUR SPECIAL
LOW PRICES.

**DONEGAN
AND
SWIFT,**

6 Murray St., New York.

Figure.	Length Inches.	Weight Lbs.	Price Per Lb.
1834	24	4½	25
1835	24	6	45
1836		7½	25

SPIKE AND BOLT PULLER.

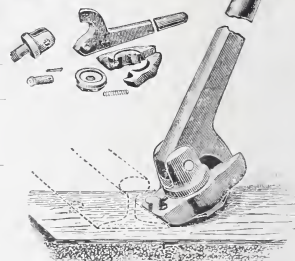
Drop-Forged from Steel.

Handle 5 ft. long.

Will not bend the
spikes.

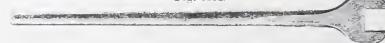
Price \$5.00
complete.

Fig. 1833.



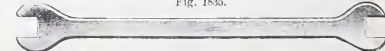
SINGLE END STEEL TRACK WRENCH.

Fig. 1834.



DOUBLE END TRACK WRENCH.

Fig. 1835.



RAIL FORKS, CAST STEEL.

Fig. 1836.



DONEGAN AND SWIFT, 6 MURRAY ST., NEW YORK.

SWIFT'S RAILROAD TRACK DRILL, FOR CONTRACTOR AND RAILROAD.

SWIVEL CLAMP DRILL.

Can Furnish Square or Taper Hole in Spindle, as Desired.
Drills $\frac{3}{8}$ inch Hole.

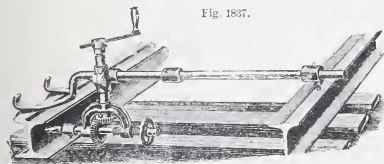


Fig. 1837.

TRACK DRILL WITH HAND WHEEL.

Capable of Drilling a Hole 1 inch in Diameter and 1 inch
Deep, in 3 Minutes.

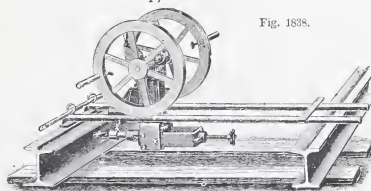


Fig. 1838.

FISH PLATE DRILL.

Adapted to any Height or Size of Rail. Drills $\frac{3}{8}$ inch Hole.

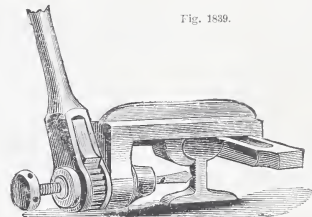


Fig. 1839.

UNDER CLUTCH TRACK DRILL.

Can be Immediately Released by Drawing out the Pin. Drills $\frac{3}{8}$ inch Hole.

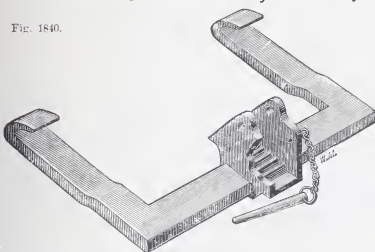
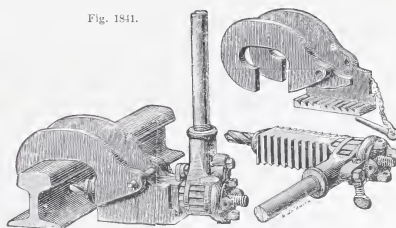


Fig. 1840.

OVER CLUTCH TRACK DRILL.

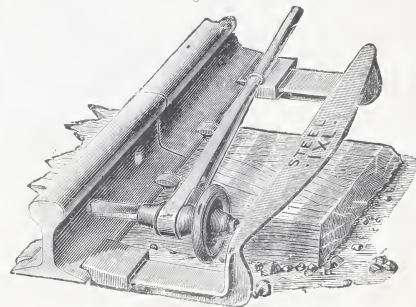
Fig. 1841.



IXL. TRACK DRILL.

It is strong, light and easily adjusted.
The clamp, being of steel, will not break.
It drills holes $\frac{3}{8}$ inch for a joint without drawing the spikes
or moving the clamp.
Adjustment from one hole to another is done more easily
than with any similar tool.

Fig. 1842.



STREET RAIL DRILL and NUT WRENCH.

"A" is a Double Acting Socket Wrench.
"B" is a Clamp, can be fastened to any
shaped Rail. "C" is a Ratchet for turning
the Drill. Drills $\frac{3}{8}$ inch Hole.



Fig. 1843.

WRITE FOR OUR SPECIAL LOW PRICES.

DONEGAN AND SWIFT,

6 Murray St., NEW YORK.

Figure No.	1837	1838	1839	1840	1841	1842	1843
Weight, Lbs.	30	410	23	25	30	25	---
Price, Complete	\$25.00	\$55.00	\$12.00	\$10.60	\$10.00	\$12.00	\$12.50

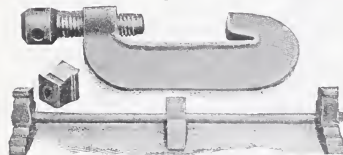
DONEGAN AND SWIFT, 6 MURRAY STREET, NEW YORK.

SWIFT'S SCREW AND HYDRAULIC RAIL BENDERS, FOR CONTRACTOR AND RAILROAD.

ANGLE-BAR STRAIGHTENER.

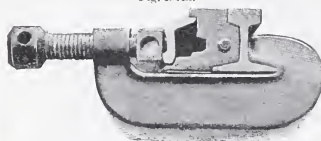
An Improved Device for Straightening Angle-Bars. One man can handle this Tool with ease.

Fig. 1844.



Bending Angle-Bar Outward.

Fig. 1844A.



Bending Angle-Bar Inward.

Fig. 1844B.



PRICE \$20.00

Write for Our
Special Low Prices.

DONEGAN
AND SWIFT,
6 Murray St.,
New York.

SCREW RAIL BENDER or JIM CROW.

Made of Wrought Iron, with Machine-Cut Steel Screw.

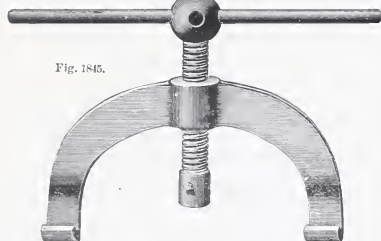
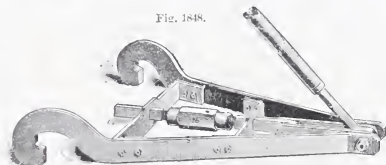


Fig. 1845.

IMPROVED RAIL BENDER.

Fig. 1848.



Will bend or straighten Rails or Shafts from 56 to 90 lbs.
Weight 140 lbs. Price \$50.00.

HYDRAULIC RAIL BENDER.

This Bender can be worked in any position.

Fig. 1846.

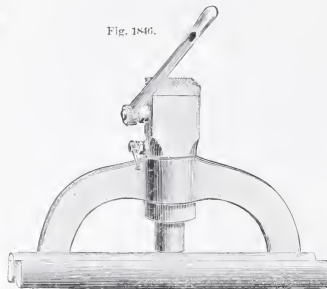


FIG. 1846.

	Pressure	Weight	Price
For 45 lb. Rail.....	10 tons	102 lbs.	\$55.00
" 65 lb. ".....	20 "	160 "	75.00
" 90 lb. ".....	30 "	214 "	95.00

This Bender made to suit any style of street rail upon receipt of drawing of section of the rail.

SCREW RAIL BENDER.

For Heavy Sections especially.

Showing Front View.

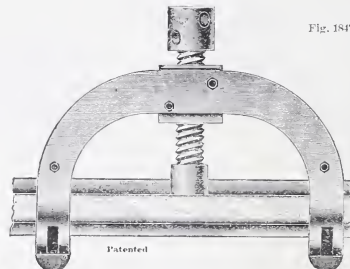


Fig. 1847.

End View.



Will bend Rails from 60 to 90 lbs. Weight 250 lbs. Price \$75.00.

FIG. 1845.

For Steel Rails, up to	20	50	78	95 lbs. per yard.
Span to Centre of Claws	16	22	28	28 inches.
Diameter of Screw.....	1 3/4	2 1/4	2 3/8	2 3/4 "
Weight, with Lever	45	98	160	200 lbs.
Price, Complete.....	\$18.00	30.00	45.00	54.00

DONEGAN AND SWIFT, 6 MURRAY ST., NEW YORK.

SWIFT'S PICK, MATTOCK, CAR PUSHER, AND TRACK TOOLS, FOR CONTRACTOR AND RAILROAD.

RAILROAD PICK. Polished Points.
Fig. 1849.



T Style.
Fig. 1852.



CLAY PICK. Adze Eye.
Fig. 1850.



RAILROAD TAMPING PICKS.
Polished Points.

CONTRACTORS' PICK. Forge-Finished and Oiled.
Fig. 1851.



V Style.
Fig. 1853.



DRIFTING PICK. Ground and Oil-Finished.
Fig. 1854.



Weight...	4	4 to 5	5	5 to 6	6	6 to 7	7	7 to 8	8	8 to 9	9	9 to 10	10	10 to 11	11 to 12
Fig. 1849, price per doz.	\$11.50	\$11.50	\$12.00	\$12.50	\$13.00	\$13.50	\$14.00	\$14.50	\$15.00	\$15.50	\$16.00	\$17.50	\$18.50	\$19.50	\$20.50
" 1850, " "		11.50	12.00	12.50	13.00	13.50	14.00	14.50	15.00	15.50	16.00	17.50	18.50	19.50	20.50
" 1851, " "							18.00	18.50	19.00	20.00	21.00	22.00	23.00		
" 1852, " "							18.00	18.50	19.00	20.00	21.00	22.00	23.00		
" 1853, " "							18.00	18.50	19.00	20.00	21.00	22.00	23.00		
" 1854, " "		14.00	15.00	16.00		17.50									

MATTOCKS.

Fig. 1855, 1856, 1857, 1858, 1859.



GRUB HOES.

Fig. 1860.



Fig. 1861.



Fig. 1860, 3 lbs., per doz.	\$11.50
" 1861, 3½ lbs., per doz.	12.00
" 1862, 4 " " "	12.50
" 1863, 4½ " " "	13.00
" 1864, 5 " " "	13.50
" 1865, 5½ " " "	14.00
" 1866, 6 " " "	14.50
" 1867, 6½ " " "	15.00

RAILROAD TRACK CHISEL.
For Cutting Rails.

Fig. 1833.



Fig. 1855, Adze Eye, Long Cutter, 6 lbs., per doz.	\$17.00
" 1856, " " " " " " " "	16.50
" 1857, " " " " " " " "	16.00
" 1858, " " " " " " " "	16.00
" 1859, " " " " " " " "	16.00
" 1860, " " " " " " " "	16.00
" 1861, " " " " " " " "	16.00
" 1862, " " " " " " " "	16.00
" 1863, " " " " " " " "	16.00
" 1864, " " " " " " " "	16.00
" 1865, " " " " " " " "	16.00
" 1866, " " " " " " " "	16.00
" 1867, " " " " " " " "	16.00

RAILROAD TRACK PUNCH.
Solid Steel. Square or Round Point.

Fig. 1864.



SPIKE MAUL.
Solid Steel.

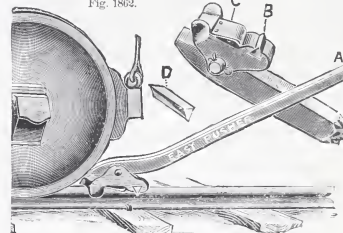
Fig. 1863.



Weight, lbs.	Fig. 1863	Fig. 1864	Fig. 1865
Price per lb.	\$0.40	.40	.30

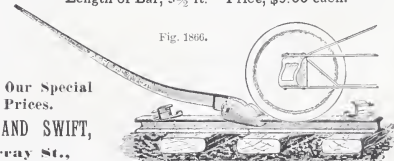
THE EASY CAR PUSHER.
Does not Lift, but Pushes. Weight, 20 lbs. Length of Bar, 5½ ft. Price, \$5.00 Each.

Fig. 1862.



PERFECTION CAR PUSHER.
Will not Slip in Moving Loaded Cars. Weight, 22 lbs. Length of Bar, 5½ ft. Price, \$5.00 each.

Fig. 1866.



Write for Our Special
Low Prices.
DONEGAN AND SWIFT,
6 Murray St.,
New York.

DONEGAN AND SWIFT, - - 6 MURRAY STREET, NEW YORK.

SWIFT'S SQUARE AND ROUND POINT SHOVEL,

FOR CONTRACTOR AND RAILROAD.

D HANDLE, SQUARE POINT.
SOLID CAST STEEL.

Back Strap.
Fig. 1867.



Plain Back.
Fig. 1868.



Fig. 1869.



Back Strap, Extra Wide.
Fig. 1870.



LONG HANDLE, SQUARE POINT.
Back Strap.
Plain Back.

Fig. 1871.



Fig. 1872.



D HANDLE, ROUND POINT.
SOLID CAST STEEL.

Back Strap.
Fig. 1873.



Fig. 1874.



Back Strap, Extra Wide.
Fig. 1875.

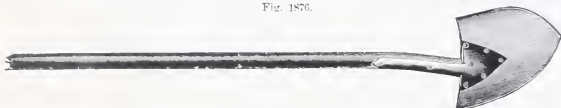


WRITE FOR OUR SPECIAL LOW PRICES.

DONEGAN AND SWIFT, 6 Murray St., New York.

LONG HANDLE, BACK STRAP, ROUND POINT.

Fig. 1876.



LONG HANDLE, PLAIN BACK, ROUND POINT.

Fig. 1877.



Size Number	1	2	3	4	5	6	7	8	9	10	11	12
Fig. No. 1867, Price Per Doz.	\$15.00	15.00	15.50	16.50	17.25	18.25	19.50	20.50	21.00			
" 1868, " "	\$14.75	15.00	15.50	16.00	17.00	18.00	19.00	30.00	21.00	22.00	23.50	25.50
" 1869, " "	\$16.00	19.00	19.50	20.50	21.25	22.25						
" 1870, " "	\$24.75	25.50	26.25		27.75	25.00						
" 1871, " "	\$15.50	16.00	16.50	17.00	17.50							
" 1872, " "	\$15.00	15.50	16.00	16.50	17.00							
" 1873, " "	\$15.50	13.00	16.50	17.50	18.00		19.00	19.75	20.50			
" 1874, " "	\$15.00	15.50	16.00	17.00	17.50		19.00	19.50				
" 1875, " "	\$24.75						28.00	29.00				
" 1876, " "	\$16.00	16.50	17.00									
" 1877, " "	\$15.00	15.50	16.00	16.50								

These Prices are for Black Shovels. Add 75 cents more per Dozen for Polished.

DONEGAN AND SWIFT, 6 MURRAY ST., NEW YORK.

SWIFT'S TAMPING AND HOLLOW BACK SHOVELS AND POST HOLE SPOONS, FOR CONTRACTOR AND RAILROAD.

RAILROAD TAMPING SHOVELS. SOLID CAST STEEL.

Plain Back.
Fig. 1878.



Patent
Malleable
D Tamping
Top.

Fig. 1879A.



Broad Strap.
Fig. 1879.



D HANDLE,
Moulders' Shovel.
Plain Back.
Fig. 1880.



D HANDLE,
ROUND POINT SHOVELS.
SOLID CAST STEEL.

Wide Mouth.
Fig. 1881.



Narrow Mouth.
Fig. 1882.



HOLLOW BACK,
SQUARE POINT SHOVELS.

Fig. 1883.



Fig. 1884.



D HANDLE, GAL-
VANIZED WIRE
SCOOP,
For Handling Pota-
toes, Coke, Ice, etc.
Fig. 1885.



SPOON FOR DIGGING OUT POST HOLES.

Size, 10 x 8 1/4 inches. Length of Handle, 7 feet and 8 feet.
Fig. 1886.



FLAT BOTTOM SPOON.

Size and Price same as Fig. 1896.
Fig. 1893A.



WRITE FOR OUR SPECIAL LOW PRICES.

DONEGAN AND SWIFT, 6 Murray Street, New York.

Size Number	1	2	3	4	5	6
Figure No. 1878.	\$15.00	16.50	18.00	..	..	..
" 1879A.	\$5.00	..	..	..	..	..
" 1879.	\$13.50	15.25	..	..	..	..
" 1880.	\$11.00	12.50	13.25	14.50	15.50	16.50
" 1881.	\$15.00	16.00	16.25	..	17.00	..
" 1882.	\$14.50	15.50	..	..	..	..
" 1883.	\$14.50	15.50	17.00	17.50	19.00	20.00
" 1884.	\$13.50	14.00	15.00	15.50	18.00	19.00
" 1885.	\$20.00	22.00	..	..	..	..
" 1886 and 1886A.	\$17.75	18.60	20.00	21.85	..	..
	Price per Doz.					

DONEGAN AND SWIFT, 6 MURRAY STREET, NEW YORK.

SWIFT'S CAST STEEL SPADE AND SCOOP. FOR CONTRACTOR, RAILROAD AND COAL YARD.

D HANDLE SPADES.

SQUARE POINT.

Back Strap.
Fig. 1887.



Plain Back.
Fig. 1888.



ROUND POINT,
Plain or Back
Strap.
Fig. 1889.



Back Strap.
Fig. 1890.



Plain Back.
Fig. 1891.



LONG HANDLE SPADES.

Back Strap.
Fig. 1892.



NARROW MOUTH,
Back Strap, Coal Scoop.
Fig. 1893.



WIDE MOUTH,
Hollow Back Scoop.
Fig. 1894.



ROUND POINT, OR BREAKING DOWN SCOOP.

Fig. 1895.



LONG HANDLE HOLLOW BACK SCOOP.

Fig. 1896.



Size Number. 1 2 3 4 5 6 7 8 9 10

Fig. No. 1887.	Price per doz.	\$15.50	16.00	17.00	18.00						
" 1888.	" "	\$15.50	16.00	16.50	17.50						
" 1889.	" "	\$16.00	17.00								
" 1890.	" "	\$15.00	15.50	16.00							
" 1891.	" "	\$16.00	17.00	17.50							
" 1892.	" "	\$16.00	17.25	18.00							
" 1893.	" "	\$17.50	17.75	18.25	18.50	19.00	19.50	20.00	21.00	21.50	22.00
" 1894.	" "	\$12.50	13.75	14.00	14.25	14.50	15.00	15.25	15.75		
" 1895.	" "	\$17.00	17.25	18.00	18.25	18.50	18.75				
" 1896.	" "	\$18.00	18.25	18.75	19.00	19.50	20.00				

These Prices are for Black Spades and Half-Polished Scoops.
For Polished Spades, add 75c. per dozen.
For Polished Scoops, add 25c. per dozen to these prices.

WRITE FOR OUR

**SPECIAL LOW
PRICES.**

DONEGAN AND SWIFT,

**6 Murray St.,
NEW YORK.**

DONEGAN AND SWIFT, 6 MURRAY ST., NEW YORK.

FOR STORE, WAREHOUSE AND RAILROAD.

Half Ironed.
Fig. 1897.

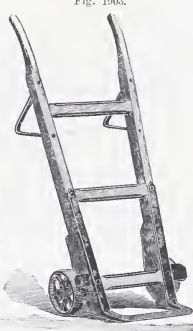
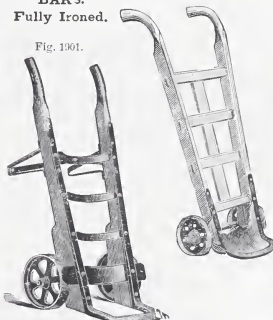
Fully Ironed.
Fig. 1898.

Fig. 190b.

STEEL CROSS
BARS.
Fully Ironed.

Fig. 1903

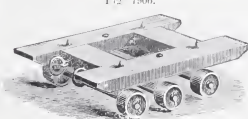
Fig. 1904.



4 Wheels
Fig. 1905.



6 Wheels.
1906



PLATFORM TRUCK,
WITH WOOD FRAME,
IRON HANDLE,
WHEELS AND AXLES.

Fig. 1908.

MEAT AND GRAIN TRUCK.
STEEL AXLES, BRACES
AND HANDLES.
CAST IRON FIFTH WHEEL.

Flz. 1909.

Low Prices.

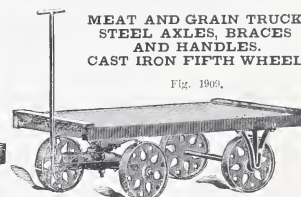
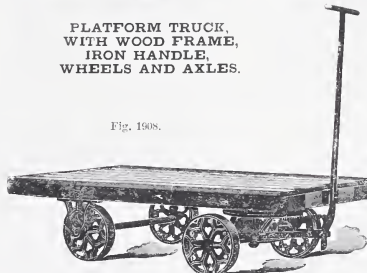
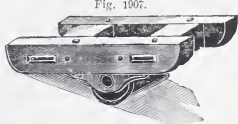
DONEGAN AND SWIFT,

6 Murray Street,

New York.

TIMBER DOLLY.
ALSO USED AS ROLLER
WHEN BOTTOM SIDE UP.

Fig. 1907.

[illegible]

DONEGAN AND SWIFT, 6 MURRAY STREET, NEW YORK.

SWIFT'S WHEELBARROW, WOOD FRAME, FOR RAILROAD, CANAL and FACTORY.

CANAL BARROW.

Cleated, Braced and Bolted. Iron Hub. Steel Wheel.

Fig. 1910.



BENT STAVE TRAY.

Bolted. Steel Wheel.

Fig. 1913.



WRITE FOR OUR SPECIAL LOW PRICES.

DONEGAN AND SWIFT,

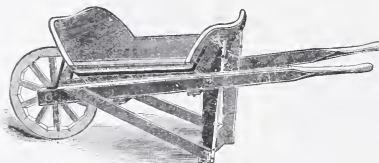
6 MURRAY STREET, - - - - NEW YORK.

BENT ELM TRAY.

For Corn, Coal, Sawdust, Manure, Ashes, etc.

Wood Wheel.

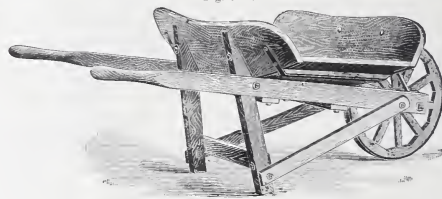
Fig. 1911.



CLAY BARROW.

Bolted, Cleated and Strapped. Wood Wheel.

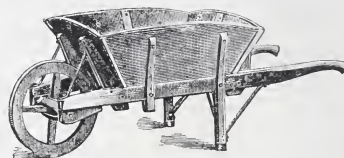
Fig. 1912.



FOUNDRY BARROW.

Braced and Bolted. Iron Bands on Hub and End of Legs.

Fig. 1915.



**These Barrows knocked down for
Shipping are easily set up.**

STONE OR PIG METAL BARROW.

Straight Handle. Bolted and Strapped. Wood Wheel.

Fig. 1916.



TRAY DOVETAILED IRON.

Strapped and Nailed. For Sawdust, Malt, etc. Wood Wheel.

Fig. 1914.

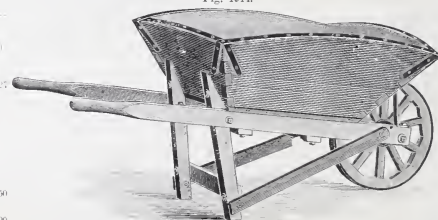


Figure No.	1910	1911	1912	1913	1914	1915	1916
Depth of Tray at Handle							
Inches	11 1/2			12	16	14	
Depth of Tray at Wheel							
Inches	14 1/2			15	20	14	20
Size of Tray at Bottom							
Inches				17x18	17x18 1/2	25x25	
Size of Tray at Top							
Inches	42x32			32x23	41x43	28x34	
Diameter of Wheel							
Inches	30 1/2	17	11	17	21	19	17
Weight, lbs.	50	60	50	50	67	89	130
Price, with Wood Wheel	\$2.75	4.00	2.75	3.50	4.50	5.50	10.00
Price, with Steel Wheel	\$8.00	4.50	3.00	4.00	5.50	6.50	5.00

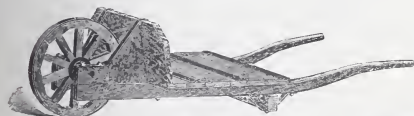
DONEGAN AND SWIFT, 6 MURRAY ST., NEW YORK.

SWIFT'S WHEELBARROW, CART AND WAGON, FOR CONTRACTORS, RAILROAD AND FACTORY.

STONE BARROW.

Bent Handles, Bolted, Strapped and Ironed. Wood Wheel.

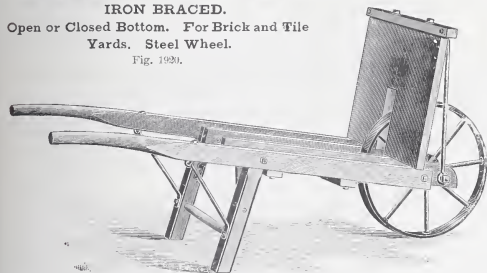
Fig. 1917.



IRON BRACED.

Open or Closed Bottom. For Brick and Tile Yards. Steel Wheel.

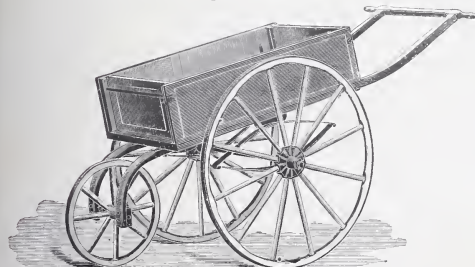
Fig. 1921.



HAND PUSH CART.

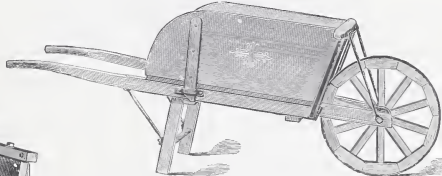
Three Wheels. Rear Braced, with Springs.

Fig. 1921.



Wood Wheel.

Fig. 1918.

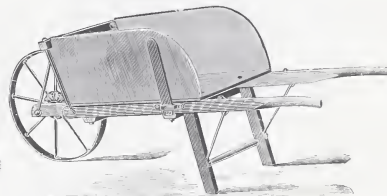


GARDEN BARROWS.

Double Frame, Removable Sides.

Steel Wheel.

Fig. 1919.

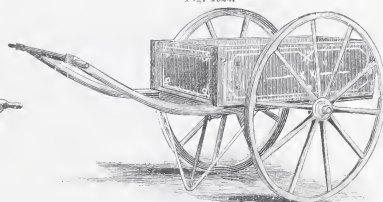


These barrows can be knocked down
in small compass for shipping.

HAND CART.

Wood Wheels. Rear Brace.

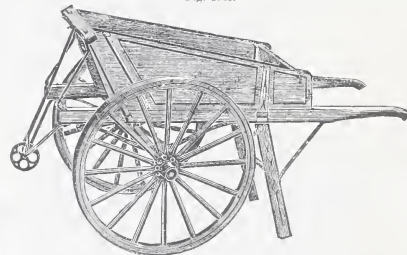
Fig. 1923.



PUSH CART.

Two Large Wood and One Small Iron Front Wheel.

Fig. 1923.



WRITE FOR OUR SPECIAL LOW PRICES.

DONEGAN AND SWIFT,
6 MURRAY STREET, NEW YORK.

Fig. No.	1917	1918	1919	1920	1921	1922	1923
Size of Box. Inches	26x27	20x35	22x35	24x28	26x31	21 $\frac{1}{2}$ x17 $\frac{1}{2}$	24x29
Depth of Box. Inches	11	12	14	21	30	10	9
Diameter of Wheel. Inches	17	16 $\frac{1}{2}$	19	21	16 $\frac{1}{2}$	9	36
Weight. Lbs.	72	45	52	59	80	25	62
Price. With Wood Wheel	\$6.00	4.00	5.00	6.00	6.50	4.00	5.00
Price. With Steel Wheel		\$4.50	5.25	6.25	7.00	4.50	5.50
							25.00
							8.25
							9.00
							10.50
							12.50

DONEGAN AND SWIFT, 6 MURRAY ST., NEW YORK.

SWIFT'S STEEL TRAY WHEELBARROW AND WAGON.

FOUNDRY BARROW.

Wood Frame Iron Braced. Steel Wheel.

CLAY BARROW.

Adapted for Heavy Work. Steel Tray. Wood Frame.

RAILROAD BARROW.

Tray Steel Pressed. Wood Frame.

Fig. 1924.



Fig. 1925.

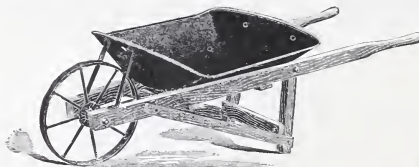


Fig. 1926.



SAND OR MORTAR BARROWS.
Iron Braced. Steel Wheels. Wood Frame.

Fig. 1927.

TWO-WHEEL BARROW.
Iron Wheels. Wood Handles.

Fig. 1928.

**STEAMSHIP AND COAL
YARD BARROW.**



Fig. 1929.

With Either Wood
or Iron Handles.
Large Iron
Wheels.

THREE-WHEEL BARROW.
Easy to Dump. Wood Handles and Wheels.

Fig. 1930.



TWO-WHEEL BARROW.
Clean Discharge. Heavy Iron Top and Handles. Wood Wheels.

Fig. 1931.



LONG UPTURNED NOSE.
Legs Well Braced. Two Iron Wheels.
Wood Frame.

Fig. 1932.



FIGURE NO.	1924			1925			1926			1927			1928			1929			1930			1931			1932										
Capacity.....	3	4	6	4	4	4	4	5	6	7	8	10	12	11	700	8	10	12	14	20	25	30	40	50	60	80	10	12	14	20	25	30	40	50	60
Cubic Feet.....	3	4	6	4	4	4	4	5	6	7	8	10	12	11	700	8	10	12	14	20	25	30	40	50	60	80	10	12	14	20	25	30	40	50	60
Length of Tray.....	32	34	44	32	32	32	32	35	300	350	400	500	600	700	800	1000	1250	1500	1000	1250	1500	2000	2500	3000	4000	5000	6000	7000	8000	9000	10000	12000	15000	20000	
Width of Tray.....	22	24	33	33	33	33	33	31	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Depth of Tray.....	5	6	8	11	11	11	11	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Diameter of Wheel.....	16	16	18	16	16	16	16	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Weight.....	57	59	66	60	60	60	58	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Price.....	\$ 5.00	7.00	9.00	5.50	5.00	5.00	22.00	24.00	26.00	28.00	30.00	32.00	36.00	40.00	45.00	50.00	60.00	70.00	80.00	90.00	100.00	120.00	150.00	200.00	250.00	300.00	350.00	400.00	450.00	500.00	600.00	700.00	800.00	900.00	

DONEGAN AND SWIFT, 6 MURRAY STREET, NEW YORK.

SWIFT'S STEEL TRAY WHEEL BARROWS

FOR CONTRACTOR, RAILROAD and FOUNDRY.

CLAY AND MINING BARROWS. Size of Tray: 33 1-3 in. long, 29 in. wide, 6 3-4 in. deep.

CLAY.

Fig. 1933.



SMELTING FURNACE BARROW.

Extra Heavy. Suspension Brace.

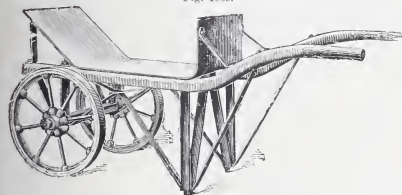
Fig. 1936.



FIG METAL BARROW.

Bed, Front and Back of one piece. Double Wheel, Suspension Braces.

Fig. 1939.



MINING, SUSPENSION BRACES.

Fig. 1934.



COAL AND ASH BARROW.

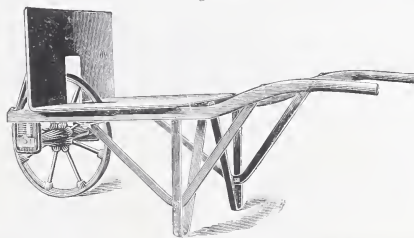
Rear heavy braced.

Fig. 1937.



BRICK BARROW. Solid or opening Bed Spring on Axle.

Fig. 1940.



FOUNDRY BARROW,

SUSPENSION BRACES.

Fig. 1935.

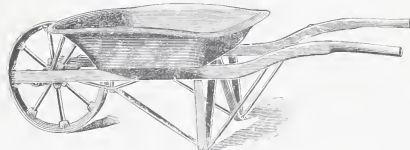


FIG METAL BARROW.

Bed, Front, and Front Braces of one plate. Suspension Braces

Fig. 1938.



WRITE FOR OUR SPECIAL LOW PRICES.

DONEGAN AND SWIFT,

6 Murray St., NEW YORK.

Barrows knocked down for shipment in lots of 6.

Fig. 1941.

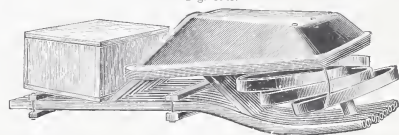


Figure No.	1933				1934				1935		1936		1937				1938	1939	1940	
Capacity, cubic feet	3	3	3	3	3	4	4	3	3	4			325	200	250	325	325	400		
Capacity, lbs.													78	130	84	90	105	130	120	
Weight, lbs.	60	68	74	80	86	92	130	85	100	110	110	130	12	12	12	10	10	12	120	95
Tray Steel No.	16	15	14	13	12	12	10	13	12	12	12	12	16	16	16	16	16	16	16	115
Diameter Wheel, inches.	16	12	16	16	16	16	14	16	16	16	16	16	16	16	16	16	16	16	16	135
Price	\$10.00	11.50	12.00	12.50	14.00	15.00	22.00	14.00	15.00	16.50	25.00	14.50	15.00	16.00	20.00	22.00	18.00	30.00	14.00	17.00

DONEGAN AND SWIFT, 6 MURRAY ST., NEW YORK.

SWIFT'S STEEL WHEELBARROW AND CAR,

FOR CONTRACTOR, RAILROAD AND FACTORY.

DIRT BARROWS.

Well Braced. Iron Tubular Handles.

Fig. 1942.



Fig. 1943.



COAL BARROWS.

Extra Deep Tray. One Wheel.

Fig. 1944.



Two Wheels.

Fig. 1945.



CANAL BARROW.

Fig. 1946.



MINING BARROW.

Fig. 1947.



COKE OR COAL BARROW.

Fig. 1948.



Tubular Steel Barrows. Edges of Tray are Flanged and Turned Over a $\frac{5}{16}$ -inch Steel Rod. This Rod prevents the Tray from breaking at the edge and makes it much stronger.

CLAY BARROW.

Heavy Braced and Bolted.

Fig. 1949.



FOUNDRY BARROW.

Made to Dump Forward. Load Easily Discharged.

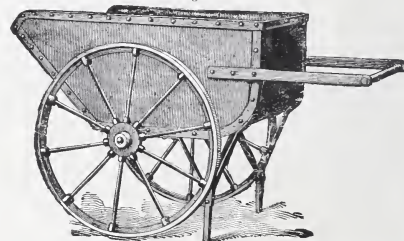
Fig. 1950.



TWO-WHEEL BARROW.

For Coal or Coke. Ball Bearing. Perfectly Balanced.

Fig. 1951.



Write for Our Special Low Prices.

DONEGAN AND SWIFT,

6 Murray Street, - - - New York.

These Barrows can be knocked down in small compass for shipment.

FIGURE NO.	1942				1943				1944				1945				1946				1947				1948				1949				1950				1951								
CAPACITY.....LBS.	135	135	180	225	300	350	400	425	450	500	525	550	600	650	700	750	800	850	900	950	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600	2700	2800	2900	3000				
CAPACITY.....CUBIC FEET	3	3	4	5	6	8	10	8	10	8	10	6	9	12	3	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		
TRAY MADE OF.....NO. STEEL	16	14	14	11	11	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	
SIZE OF TRAY.....INCHES																																													
PRICE.....	\$10.75	11.50	13.50	15.00	18.00	20.00	25.00	26.00	26.00	29.00	38.00	42.00	45.00	48.00	50.00	52.00	54.00	56.00	58.00	60.00	62.00	64.00	66.00	68.00	70.00	72.00	74.00	76.00	78.00	80.00	82.00	84.00	86.00	88.00	90.00	92.00	94.00	96.00	98.00	100.00	102.00	104.00	106.00	108.00	110.00

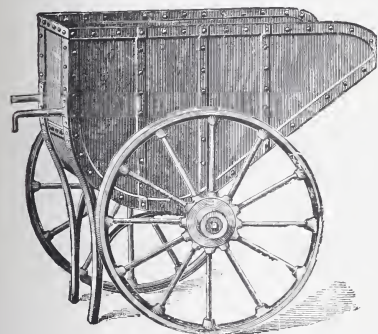
DONEGAN AND SWIFT, - - - 6 MURRAY ST., NEW YORK.

SWIFT'S CHARGING AND ASH BARROW, AXLE AND WHEEL.

STEEL BALL-BEARING CHARGING BARROW.

Long Nose, Clean Discharge of Tray.

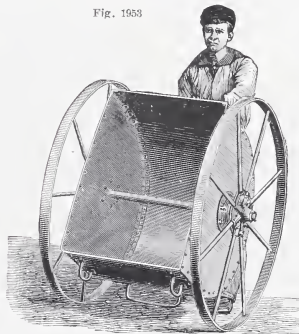
Fig. 1952



ASH BARROW.

Revolves within Diameter of Wheels.
Steel Body and Wheels.

Fig. 1953



STEEL WHEELS.

Round Steel Spokes, Iron Tires.

Fig. 1954

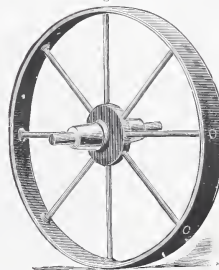
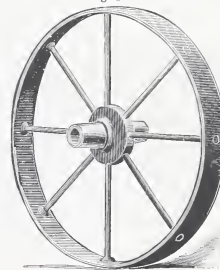


Fig. 1954a



SELF-OILING TUBULAR AXLE.

Showing Coached Bed and Self-oiling Chamber. For Express Wagons and Trucks.

Fig. 1955



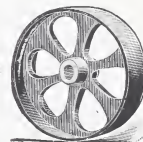
SOLID IRON AXLE.

Fig. 1956



CAST IRON TRUCK WHEELS.

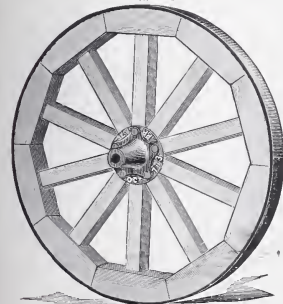
Fig. 1957



BARROW WOOD WHEEL.

Iron Hub Riveted to Spokes. Tire cannot come off.

Fig. 1958



WAGON WHEELS.

Steel Staggered Spokes. Can be supplied with Rubber Tires.

Fig. 1959



Figure No.	Size of Spindles.		Carrying Capacity, lbs., from	Price per Set.
	Diameter, Inches, from	Length Box, Inches, from		
1955	13 $\frac{1}{8}$ to 31 $\frac{1}{2}$	7 to 12	1200 to 10000	\$8 00 to 28 00
1956	11 $\frac{1}{8}$ to 31 $\frac{1}{2}$	6 $\frac{1}{2}$ to 14	.....	5 00 to 65 00 according to size

Figure No.	Size of Tray, Inches.	Capacity, Cubic Feet.	Diameter, Inches, from	Face, Inches, from	Length of Hub, Inches, from	Bore, Inches, from	Weight, from	Price, each.
1952	41 $\frac{1}{2}$ x 25 $\frac{1}{2}$ x 22	10	.....	.....	.....	.....	575	\$58.00
1953	52 x 30 $\frac{1}{2}$ x 30	20	.....	.....	.....	.....	725	72.00
1954	26 x 34 x 36 $\frac{1}{2}$	16	.....	.....	.....	.....	.....	60.00
1954a	.....	.....	16 to 20	1 to 4	6 to 16	.....	.....	1.00 to 4.00
1957	.....	.....	2 to 24	1 to 3	1 to 3 $\frac{1}{2}$ to 1 $\frac{1}{2}$	1 to 66	.....	.10 to 3.50
1958	.....	.....	17 to 19	1 $\frac{1}{2}$ to 2	6 to 8	9 to 16	.....	.75 to 2.00
1959	.....	.....	31	3 or 4	4 $\frac{1}{4}$	76	.....	5.00
.....	.....	.....	38	3 or 4	4 $\frac{1}{4}$	94	.....	6.50

When writing for prices of wheels mention size of hub and bore desired

DONEGAN AND SWIFT, 6 MURRAY STREET, NEW YORK.

SWIFT'S STEEL HOISTING TUB AND BUCKET, FOR CONTRACTOR, RAILROAD AND DOCK USE.

SELF-DUMPING AND SELF-RIGHTING COAL TUBS.

Side Catch.
Fig. 1960.



Back Lever Catch.
Fig. 1961.



Fitted With Double Catch, will Dump Either Side.
Upright Position.
Fig. 1962.



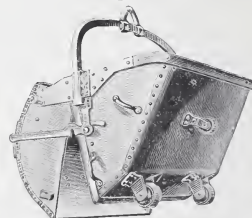
Dumped.
Fig. 1963.



Round Box Pattern.
Fig. 1964.



Bottom Dumping. Can be Opened
on Either Side and Closed
Automatically.
Fig. 1965.



WRITE FOR OUR SPECIAL LOW PRICES.

CONTRACTOR'S SELF-DUMPING BUCKET.

For Handling Stone, Sand, Clay, Mortar and Concrete.

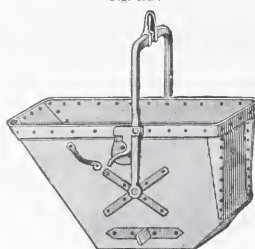
Upright.
Fig. 1966.



Discharged.
Fig. 1967.



Side Catch to Hold Open or Closed.
Fig. 1968.



DONEGAN AND SWIFT, 6 Murray St., New York.

MINING BUCKET.

Catch on Side.
Fig. 1969.



ROUND HOISTING TUBS.

Side Catch, Low Body. Bottom is Two Thickness Heavier
than Sides.

Fig. 1970.



Fig. 1970A.

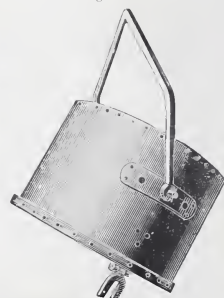


Figure Nos

1960 to 1964.

1965.

1966, 1967 and 1968.

1969.

1970 and 1970A.

	HORSE POWER.										STEAM POWER.										CUBIC FEET.										6 10 14 20 30 6 11 17 21 27 42									
	300	350	475	525	550	600	700	800	900	1120	1500	2000	2240	750	1000	3000	3	4	6	8	10	12	14	21	27	36	42	300	500	700	1000	1500	300	550	850	1050	1350	2100		
Capacity, Lbs.	24	29	30	33	34	36	37	37	39	42	48	52	53	26	29	31	33	36	40	42	47	50	57	58	22	26	30	34	37	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Length Over All, In.	33	36	36	40	41	42	44	47	51	53	57	58	59	15	18	19	20	21	23	25	29	29	32	33	28	32	35	40	48	21	22	26	30	34	40	.....	.....	.....	.....
Depth from Floor to Mouth of Tub, In.	85	98	102	118	125	130	140	150	160	170	180	190	200	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Weight, Lbs.	135	180	192	230	275	290	330	390	440	480	600	800	850	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Price	\$30.00	\$42.50	\$45.00	\$46.00	\$45.00	\$46.00	\$45.00	\$46.00	\$45.00	\$46.00	\$45.00	\$46.00	\$45.00	\$115.00	\$125.00	\$140.00	\$150.00	\$160.00	\$175.00	\$25.00	\$38.00	\$42.00	\$45.00	\$48.00	\$50.00	\$52.00	\$55.00	\$58.00	\$60.00	\$62.00	\$65.00	\$68.00	\$70.00	\$72.00	\$75.00	\$78.00	\$80.00	\$85.00		

DONEGAN AND SWIFT, 6 MURRAY STREET, NEW YORK.

SWIFT'S DUMP CAR, STEEL AND WOOD,

FOR CONTRACTOR, RAILROAD AND FACTORY.

SELF-RIGHTING DUMP CAR.

Steel Tray, Wood Frame, Iron Wheels,
Dumps Right or Left.

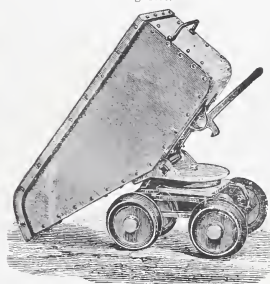
Fig. 1973.



MINING ORE CAR.

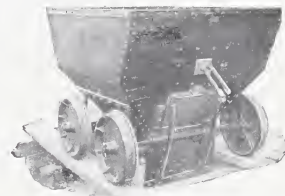
Rotary Dump Steel Car, Iron Wheels.

Fig. 1973.



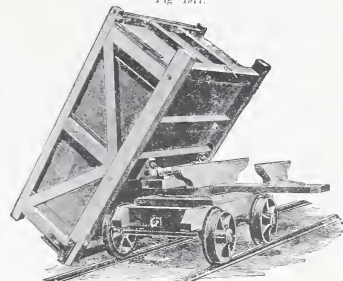
STEEL BOTTOM DUMP CAR.
With Double Drop Doors. Doors work
Automatically.

Fig. 1974.



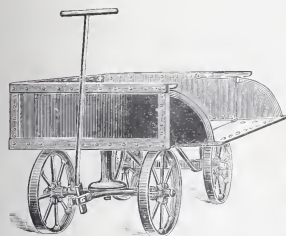
ROTARY DUMP STEEL CAR.
Wood Frame, Dumps Either Side, for Rail.

Fig. 1977.



COAL OR COKE WAGON.
Steel Tray and Frame, Adjustable
Side Dump.

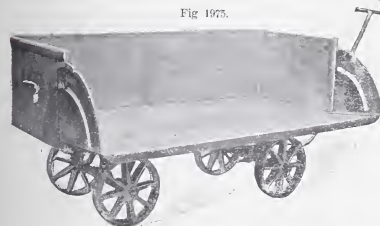
Fig. 1971.



STEEL COAL OR COKE CARS—SIDE OPENING.

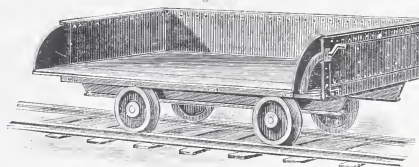
With Flat Face Iron Wheels for Pavement or Ground.

Fig. 1975.



With Flanged Iron Wheels for the Track.

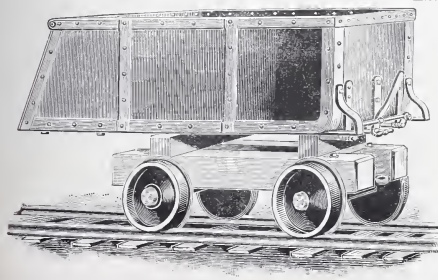
Fig. 1976.



These cars can be made any size and gauge of track required.

WRITE FOR OUR
SPECIAL LOW PRICES.

STEEL MINING CARS. Dumps at Either Side or End.



Brakes
if
needed.

Fig. 1978.

Figure No.	1971	1972	1973	1974	1975	1976	1977	1978
Capacity.....Con. lbs	900	1130	2240	3350	4480	5500	10000	20000
Capacity.....cubic ft	18	22	45	67	90	110	20	40
Length.....inches	60	72	84	98	110	120	130	140
Width Over All.....inches	31	38	50	78	81	100	120	140
Diameter of Wheel.....inches	15	14	18	18	22	16	14	12
Price.....	\$90.00	120.00	150.00	175.00	225.00	150.00	135.00	165.00
	250.00	50.00	75.00	110.00	150.00	90.00	90.00	145.00

DONEGAN AND SWIFT, 6 MURRAY STREET, NEW YORK.

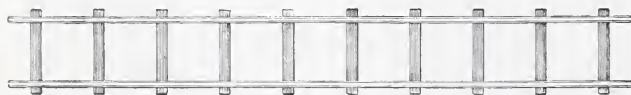
SWIFT'S STATIONARY TRACK RAILS, AND TURN TABLE.

FOR RAILROAD, CONTRACTOR AND FACTORY.

PORTABLE and STATIONARY SECTIONAL TRACK.

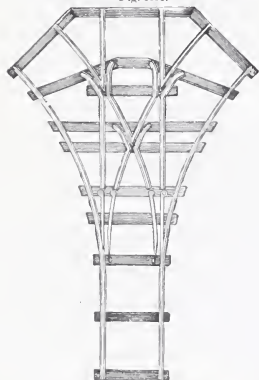
STRAIGHT TRACK.

Fig. 1979.



SWITCHES,
RIGHT OR LEFT HAND.
THREE-WAY SWITCH.

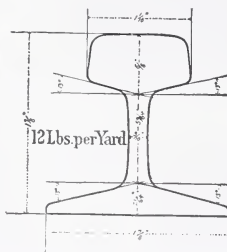
Fig. 1981.



Price quoted on receipt of specification of requirements. State weight of rail, gauge, weight of load carried, and all particulars.

RAILS.

Fig. 1982.



Lbs. to
the Yard.

Price
per Foot.

8.....	\$0.12
12.....	.18
16.....	.24

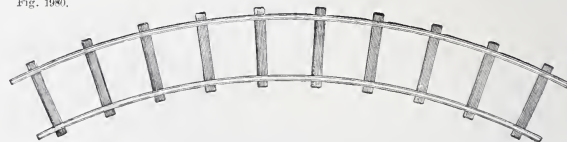
Prices for curves, crossings, switches, sectional track, etc., quoted on receipt of specifications.

WRITE
FOR OUR
SPECIAL
LOW PRICES.

DONEGAN
AND
SWIFT,
6 Murray St.,
New York.

CURVED TRACK.

Fig. 1980.



FLAT RAIL.

Fig. 1983.



1 1/2 x 4, per foot.....	\$0.06
1 1/2 x 4 1/2, " " " " " "	7
1 1/2 x 5 1/2, " " " " " "	8
1 1/2 x 6 1/2, " " " " " "	9
2 x 4 1/2, " " " " " "	10

Including
ct. sk. nails.

Prices for spikes and fish
plates quoted on application.

ROUNDED CORNER FLAT RAIL.

Fig. 1983a.



1 1/2 x 4, per foot.....	\$0.06
1 1/2 x 4 1/2, " " " " " "	7
1 1/2 x 5 1/2, " " " " " "	8
2 x 4 1/2, " " " " " "	10

Including
ct. sk. nails.

TURN TABLES.

These turn tables are made of well-seasoned wood, and consist of the table, which has a wrought-iron band around it, the four rollers and cross band for rollers to run on, and centre pivot.

They are also furnished with rail crossings, for which special prices will be quoted on application.

Fig. 1984



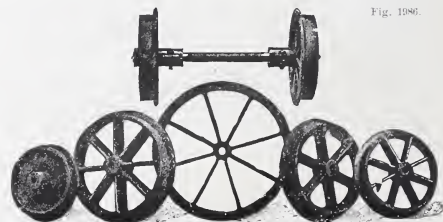
Inches Diameter.

Price.

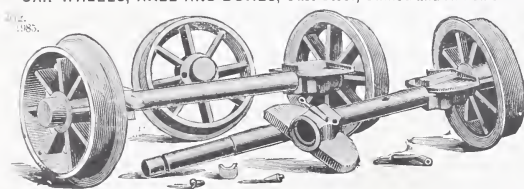
48.....	\$30.00
60.....	40.00
72.....	50.00

CAR WHEEL AND AXLES.

Fig. 1986.



CAR WHEELS, AXLE AND BOXES, Cast Steel, Chilled and Annealed.



Can furnish car wheels of various styles and weights, also axles, fitted with wheels and boxes.

Car wheels, bushed with roller or anti-friction bearings, self oiling bearings, graphite bearings and other styles.

When ordering state whether round or square axles are wanted, gauge of track and curves, if any, diameter of wheels and weight to be carried.

Prices quoted on receipt of particulars.

DONEGAN AND SWIFT, 6 MURRAY STREET, NEW YORK.

SWIFT'S PLATFORM TRUCK, PUSH AND TRACK CAR,

FOR CONTRACTOR AND RAILROAD.

PLATFORM TRUCK.

Two Large and Two Small Iron or Rubber-faced Wheels.

Fig. 1987.

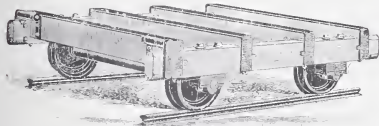


SIZE OF PLATFORM FEET.	CAPACITY LBS.	PRICE.
2 x 3	1200	\$25 00
2½ x 4	3000	32 00
3 x 8	3000	49 00

TRACK LAYING CAR.

Cross Sills bound by Steel Bands securely bolted to Frame.

Fig. 1991.



BICYCLE INSPECTION CAR.

Fig. 1994

Steel Tubing, Lug-gage Basket and Tool Pouch.



For any width of Track.

EXPRESS AND BAGGAGE WAGON.

Steel Axle, Cast Fifth Wheel, Iron Wheels 17½ in. Diameter.

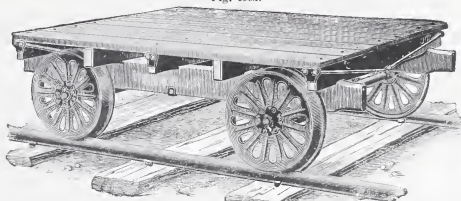
Fig. 1988.



Platform 7 ft. long, 2½ ft. wide, weight 375 lbs. Price, \$60.00.

RAILWAY PUSH CAR, Wood Top, Steel Wheels.
Size of Platform 7 ft. long, 5½ ft. wide.

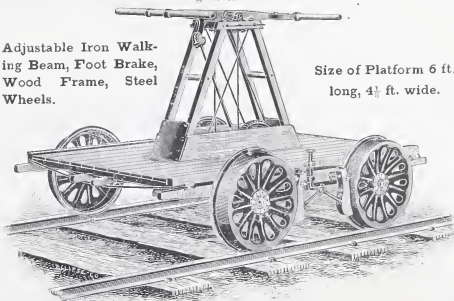
Fig. 1992.



SECTION HAND CAR.

Fig. 1995.

Adjustable Iron Walking Beam, Foot Brake, Wood Frame, Steel Wheels.



Size of Platform 6 ft. long, 4½ ft. wide.

SLOPING BACK BAGGAGE TRUCK.

Axles Turned, Wheels Bored and Faced.

Fig. 1989.



LENGTH FEET.	WIDTH INCHES.	PRICE.
7	24	\$33 00
10	30	55 00

PAPER TRUCK.

With Removable Wood Box, Iron Wheels.

Fig. 1990.



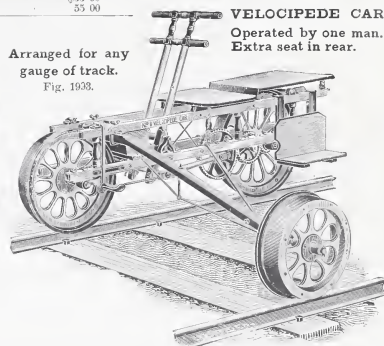
Capacity 20 Bus. Price \$35.00.

VELOCIPEDE CAR.

Operated by one man. Extra seat in rear.

Arranged for any gauge of track.

Fig. 1993.



WRITE FOR OUR SPECIAL LOW PRICES.

DONEGAN AND SWIFT,

6 Murray Street, - New York.

FIGURE NO.	CAPACITY LBS.	DIAMETER OF WHEELS	WEIGHT LBS.	PRICE
1991	12000	16	1250	\$75 00
1993	8000	20	700	60 00
1993			145	50 00
1994		17	60	90 00
1995	8000	20	675	80 00

DONEGAN AND SWIFT, 6 MURRAY STREET, NEW YORK.

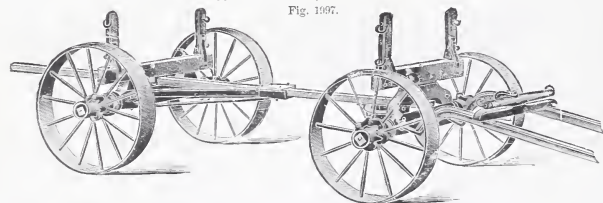
SWIFT'S LUMBER WAGON, AND PUSH CART.

FOR CONTRACTOR, RAILROAD AND FACTORY.

HANDY WAGON, WOOD FRAME.

Furnished at the same price with either Shafts or Pole. Iron Wheels, with 2, 3, 4, 5 or 6 inch Tires, as desired.

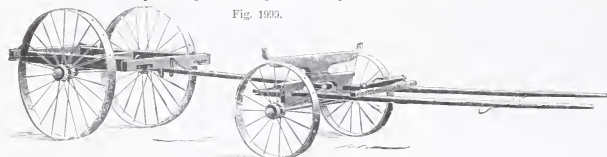
Fig. 1997.



WAGON, WOOD FRAME AND SHAFTS, IRON WHEELS.

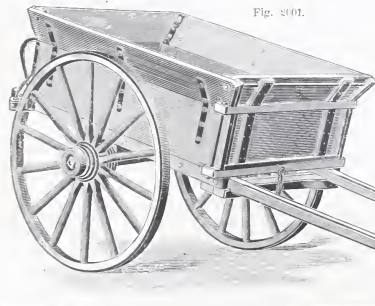
Forward and Rear Trucks are detachable, latter can be used as a Lumber Cart; when coupled together they make a perfect Lumber Wagon.

Fig. 1999.



CONTRACTORS' HEAVY DUMP CART WITH WING BOARDS OR HOPPER.

Fig. 2001.

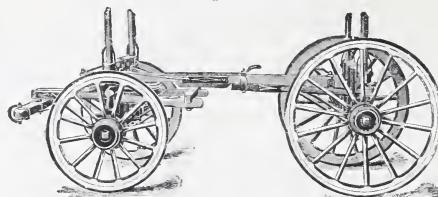


Adapted for the Hardest Usage in Hauling Rock, Gravel, Clay, etc. Size of bed inside, 66 inches long, 44 inches wide, 14 inches deep.

HOLLOW STEEL AXLE GEAR.

Front Wheel Turns under Body to Reach, for making Short Turns. Adapted for Hauling Iron Columns, Railroad Iron, etc.

Fig. 1998.



CONTRACTORS' LIGHT DUMP CART. WOOD WHEELS.

Made throughout of Hardwood, Strongly Bolted and Braced, Steel Axle. Size of bed inside, 66 inches long, 44 inches wide, 12 inches deep.

Fig. 2000.

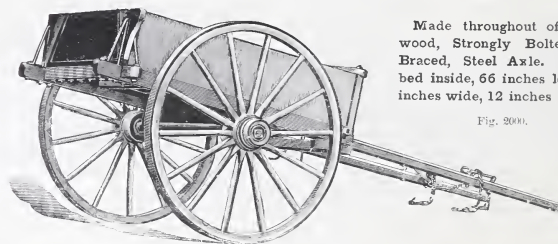


Figure No.	1997							1998			1999	2000	2001
Capacity.....	Lbs.	3,600	3,800	4,000	4,200	4,400	4,500	4,000	5,000	7,000	10,000	21 cu. ft.	21 cu. ft.
Diameter Front Wheels.....	Inches	24	26	28	30	32	34	36	36	36	36	54	54
Diameter Rear Wheels.....	Inches	30	32	34	36	38	40	48	48	48	48	44	
Weight.....	Lbs.	500	580	630	625	650	680					630	890
Price with 2 inch Tires.....		\$23.00	24.00	25.00	26.00	27.50	28.00	105.00	112.00	125.00		88.00	
Price with 3 inch Tires.....		\$23.00	24.00	25.00	26.00	27.50	28.00	113.00	120.00	133.00	154.00		60.00
Price with 4 inch Tires.....		\$23.00	24.00	25.00	26.00	27.50	28.00						
Price with 5 inch Tires.....		\$25.00	26.00	27.00	28.00	29.50	30.00						
Price with 6 inch Tires.....		\$27.00	28.00	29.00	30.00	31.50	32.00						

DONEGAN AND SWIFT, 6 MURRAY ST., NEW YORK.

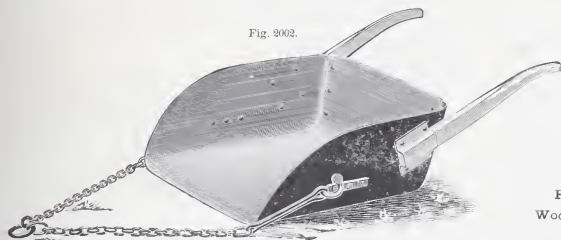
SWIFT'S STEEL ROAD SCRAPER, LEVELER AND CRADER,

FOR CONTRACTOR AND RAILROAD.

DRAG SCRAPER.

With Either Chain or Heavy Steel Ball.

Fig. 3002.



SURFACE GRADER.

Wood Frame, Steel Blade, 15 x 30 inches. For Team or One Horse.

Fig. 3005.



WRITE FOR OUR SPECIAL LOW PRICES.

DONEGAN AND SWIFT,

6 Murray Street,

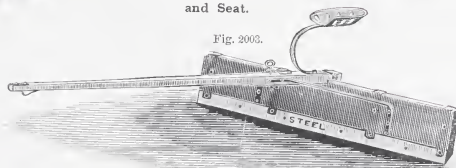
NEW YORK.

Fig. No.	3002	3003	3004
Capacity.....	3	7	9
Length.....	30	33	38
Width.....	27½	32	34
Depth.....	9	11½	12½
Length.....	.....	72	36
Width.....	.....	4	4
Weight.....	85	105	125
Price.....	\$7.50	8.00	10.00

ROAD LEVELER.

Wood Frame, Steel Blade and Seat.

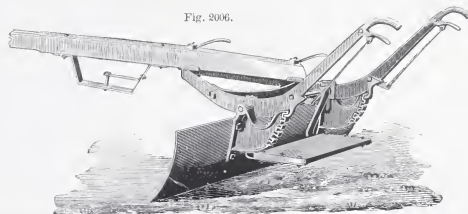
Fig. 3003.



ROAD SCRAPER.

Adjustable for Pitch or Angle. Throws Earth to the Right or Left. Steel Frame and Blade, Wood Pole for Two Horses.

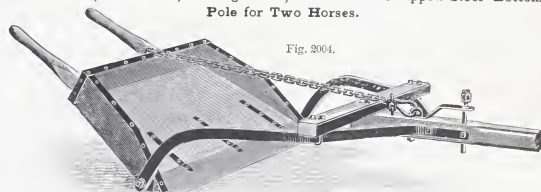
Fig. 3006.



TONGUE SCRAPER.

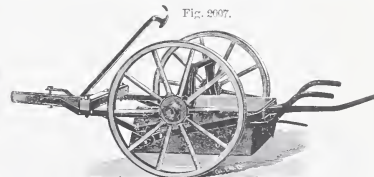
Wood Frame, Steel Shoe, Cutting Blade, Bolted and Strapped Steel Bottom, Pole for Two Horses.

Fig. 3004.



WHEEL SCRAPER. Steel Square Bowl, Sand-Proof Hub Wheels, Wood or Iron; Oil-Tempered Bottom.

Fig. 3007.



SCRAPER. Oval Pressed Bowl, Patent Automatic Lock Hooks, Bifurcated Compound Lever, Wood or Iron Wheels.

Fig. 3008.

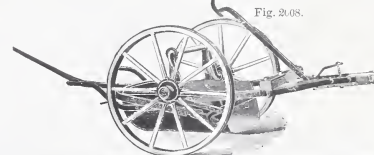


Fig. No.	3002			3003	3004	3005	3006	3007	3008		
Capacity.....	3	7	9	.....	.....	.....	9	12	16	10	73
Length.....	30	33	38	30	37	36	.....	34	38	42	34
Width.....	27½	32	34	30	34	32	.....	34	38	42	34
Depth.....	9	11½	12½	.....	9	10	.....	11½	13½	16	11½
Length.....	.....	72	36	48	30	45	60	.....	.....	.....	.....
Width.....	.....	4	4	15	17	.....	.....	.....	.....	.....	.....
Weight.....	85	105	125	150	113	123	60	206	390	605	755
Price.....	\$7.50	8.00	10.00	14.00	13.00	14.00	10.60	35.00	50.00	65.00	75.00
										50.00	67.50
											80.00

DONEGAN AND SWIFT,

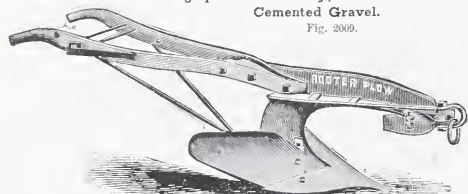
6 MURRAY ST., NEW YORK.

SWIFT'S ROAD PLOW AND ROLLER FOR CONTRACTOR AND RAILROAD.

CONTRACTOR'S PLOW.

Made Strong in all Parts; Handles well Ironed. Adapted for Breaking up Stiff Hard Clay, Hard Pan and Cemented Gravel.

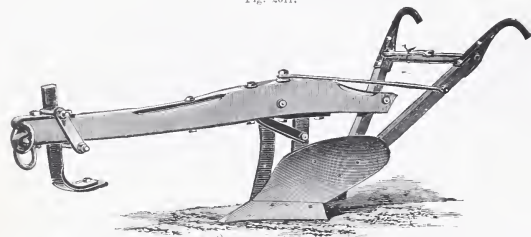
Fig. 2009.



RAILROAD FOUR-HORSE* PLOW.

Ironed Oak Beam and Handles. Cuts a Furrow 10 inches wide, and from 6 to 11 inches, as desired.

Fig. 3011.

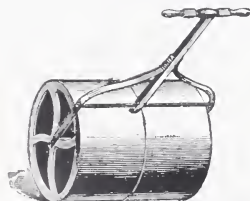


ROAD ROLLERS.

HAND ROLLER.

Weighted so as to keep Handle Always Up.

Fig. 2019.



TEAM ROLLER, WITH SEAT.

Wood Top for Holding Additional Weight.

Fig. 2013A.



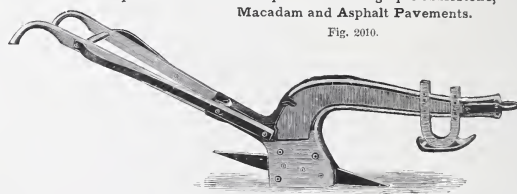
WRITE FOR
OUR SPECIAL LOW PRICES.

**DONEGAN
AND
SWIFT,
6 MURRAY STREET,
NEW YORK.**

PAVEMENT PLOW.

Adjustable and Double Reversible Bar, Steel Point. Adjustable Shoe in place of Wheel. Adapted for Tearing up Cobblestone, Macadam and Asphalt Pavements.

Fig. 2010.



CONTRACTOR'S GRADING PLOW.

Mold Board and Point made of Best Plow Steel, both Double Shinned. All sizes provided with the Best Reversible Steel Cutters.

Fig. 2012.

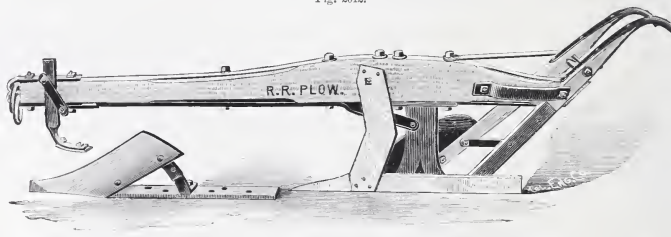


Figure No.	2009	2010	2011	2012	2013
Horse Power	2 to 4	4 to 6	6 to 8	8 to 12	12 to 14
No. of Sections	2	2	2	2	2
Diameter of Roller, inches	15	30	30	30	30
Total length of Roller, inches	30	32	30	38	48
Weight, lbs.	240	256	265	335	350
Price	\$27.00	25.00	33.00	25.00	30.00

Figure No.	2013A
Horse Power	2 to 4
No. of Sections	2
Diameter of Roller, inches	30
Total length of Roller, inches	30
Weight, lbs.	240
Price	\$27.00

IN ORDERING SPECIFY WHETHER RIGHT OR LEFT HAND PLOW IS WANTED.

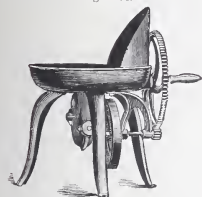
DONEGAN AND SWIFT, 6 MURRAY ST., NEW YORK.

SWIFT'S PORTABLE FORGE, GEARED & CRANK, FOR BLACKSMITH, MACHINIST AND CONTRACTOR.

For MINERS, JEWELERS, FARMERS, Etc.

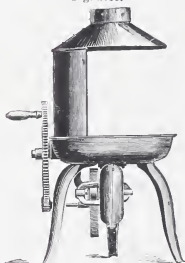
WITH SHIELD.

Fig. 3014.



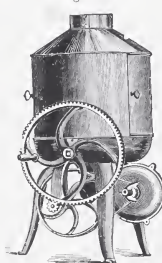
HALF HOOD.

Fig. 3015.



CLOSED HOOD.

Fig. 3016.



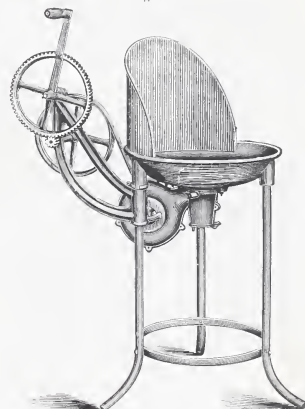
HALF HOOD OR WITH SHIELD.

Fig. 3017.



RIVET FORGE, BACK SHIELD.
Gear and Frame can be turned under Forge
for Shipping. (See Fig. 2019).

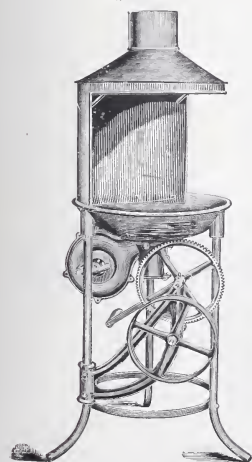
Fig. 3018.



TOOL-MAKERS' and MACHINISTS' FORGE,

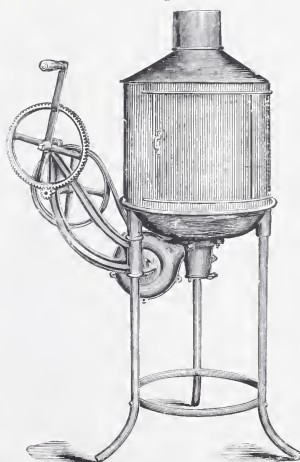
WITH HALF HOOD. Showing Gear
and Frame under Forge for Shipping.

Fig. 3019.



CLOSED HOOD.

Fig. 3020.



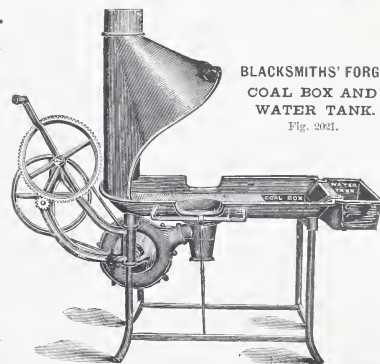
WRITE FOR OUR SPECIAL LOW
PRICES.

DONEGAN AND SWIFT,
6 Murray Street, New York.

Fig. No.	Height, Inches.	Diameter of Hearth, Inches.	Diameter of Furnace, Inches.	Weight, Lbs.	Price.
3014	15	15	6	40	\$16.00
3015	15	15	6	50	18.00
3016	15	15	6	55	20.00
3017	Shield 30 Half Hood 30	18	8 x 18	65	14.00 16.00
3018	33	18	9	80	30.00
3019	33	18	9	75	28.00
3020	33	18	9	90	26.00
3021	30	22x45	14	275	35.00

BLACKSMITHS' FORGE
COAL BOX AND
WATER TANK.

Fig. 3021.

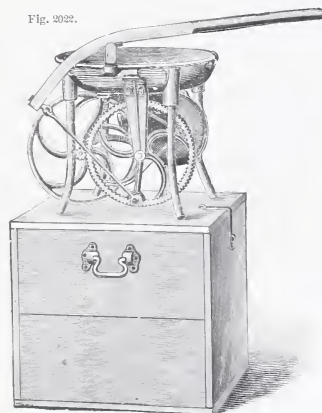


DONEGAN AND SWIFT, 6 MURRAY STREET, NEW YORK.

SWIFT'S PORTABLE FORGE, LEVER WITH RATCHET AND PAWL MOVEMENT.

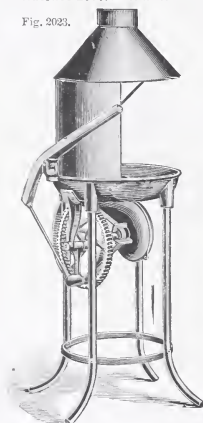
Miners and Contractors, with Case.

Fig. 2022.



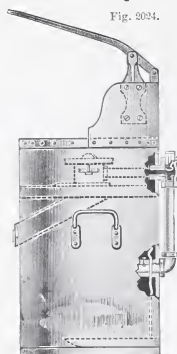
Ratchet Lever. Half Hood.

Fig. 2023.



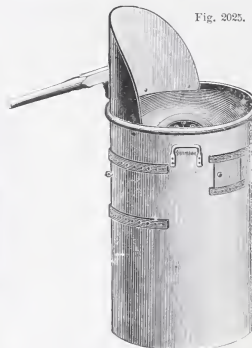
Bellow Forge.

Fig. 2024.



Railroad and Bridge Builder, with Fan.

Fig. 2025.



Boilermakers and Blacksmiths.

Fig. 2026.



WRITE FOR OUR SPECIAL LOW PRICES.

DONEGAN AND SWIFT,

6 Murray Street,

NEW YORK.

Machinists and Wheelwrights.
Half Hood. Closed Hood.

Fig. 2027.

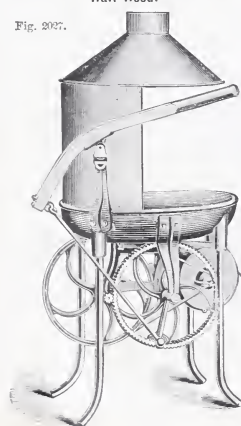
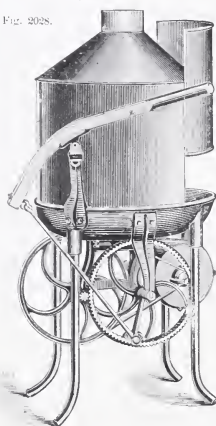


Fig. 2028.



For General Carriage and Blacksmith Work.
with Water Tank.

Fig. 2029.

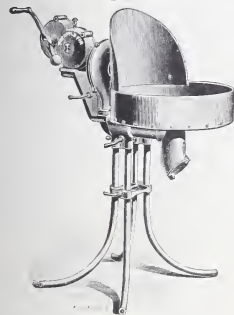


FIG. NO.	2022	2023	2024	2025	2026	2027	2028	2029
Height, Inches.	17½	30	30	32	29	29	29	30
Diameter of Hearth, Inches.	18	18	18¾	18	21 x 27	21 x 27	21 x 27	28 x 40
Diameter of Fan, Inches.	6	8	6	6	10	10	10	14
Weight, Pounds	65	75	100	110	130	140	150	250
Price.....	\$26.00	27.00	32.00	32.00	36.00	40.00	42.00	50.00
Price with Water Tank.....								\$55.00

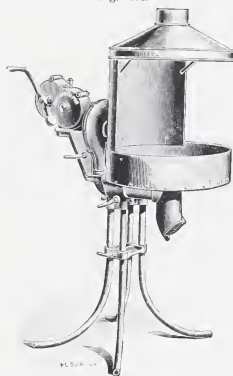
DONEGAN AND SWIFT, 6 MURRAY STREET, NEW YORK.

SWIFT'S PORTABLE FORGE, STEEL FRAME; WORM GEARS AND CRANK; BALL BEARING JOURNALS.

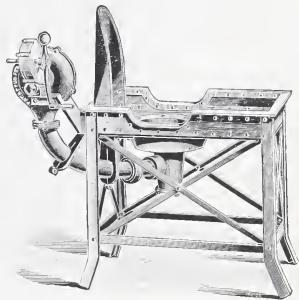
RIVET FORGE WITH SHIELD.
Fig. 2030.



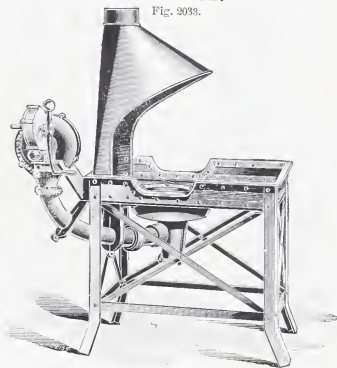
TOOLMAKER'S HALF HOOD.
Fig. 2031.



RIVET, SQUARE HEARTH FORGE,
WITH BACK SHIELD.
Fig. 2032.

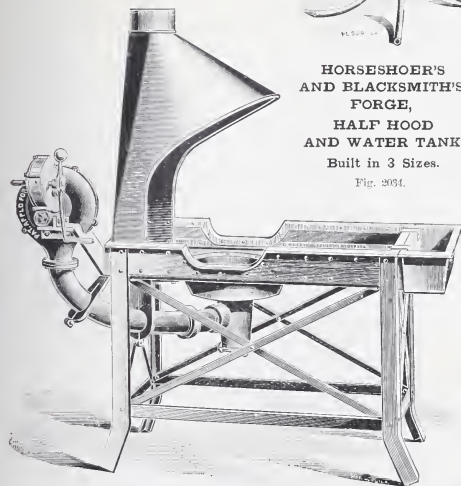


TOOLMAKER'S AND MACHINIST'S FORGE
HALF HOOD.
Fig. 2033.



These Forges can be knocked down in
small compass for Shipping.

HORSESHOER'S
AND BLACKSMITH'S
FORGE,
HALF HOOD
AND WATER TANK.
Built in 3 Sizes.
Fig. 2034.



WRITE FOR OUR SPECIAL LOW PRICES.

DONEGAN AND SWIFT,
6 MURRAY STREET, NEW YORK.

Fig. No.	2030	2031	2032	2033	2034	2035
Height Inches.	30	30	30	30	30	30
Diameter of Hearth. Inches.	18	18	18	24x24	30x30	24x24
Diameter of Fan. Inches.	9	9	9	9	10	12
Weight, Lbs.	90	90	100	110	160	175
Price, Without Water Tank.	\$35.00	38.00	40.00	45.00	55.00	49.00
Price, With Water Tank.	.....	.....	.....	60.00	65.00	70.00

ROUND
HEARTH, WITH
TELESCOPIC
HOOD, CHAIN,
WEIGHTS,
WATER TANK
AND
COAL BOX.

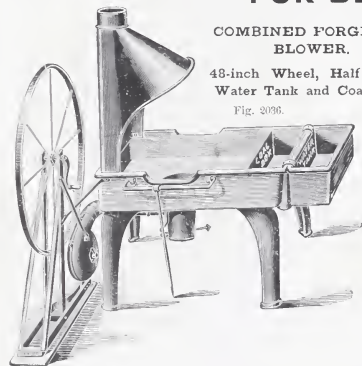


Fan Supplies
Air
Right or Left
Motion.

Fig. 2035.

DONEGAN AND SWIFT, 6 MURRAY ST., NEW YORK.

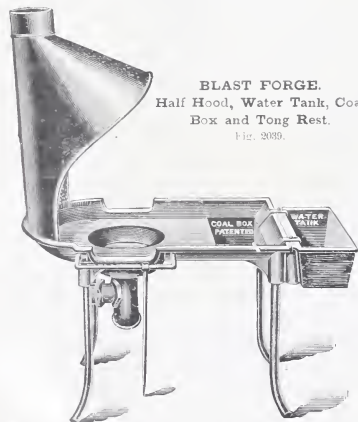
SWIFT'S PORTABLE AND STATIONARY BLAST FORGE, FOR BLACKSMITH, RAILROAD AND MACHINIST.



COMBINED FORGE AND BLOWER.

48-inch Wheel, Half Hood,
Water Tank and Coal Box.

Fig. 2036.

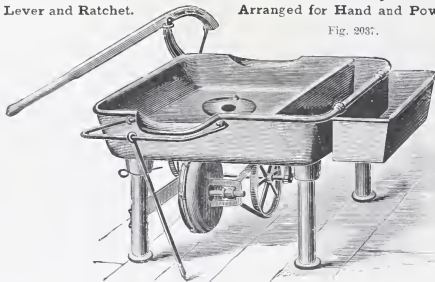


BLAST FORGE.
Half Hood, Water Tank, Coal
Box and Tong Rest.

Fig. 2039.

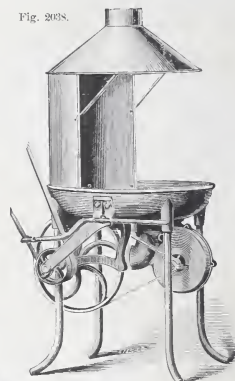
STATIONARY BLAST FORGE.
Coal Box, Water Tank and Blast Gate in Tuyere.
Lever and Ratchet. Arranged for Hand and Power.

Fig. 2037.



BELT POWER FORGE.
Half Hood, Tight and Loose Pulleys.

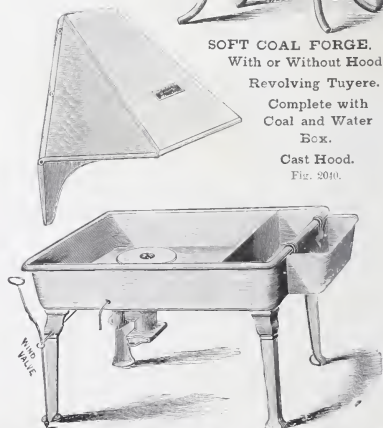
Fig. 2038.



SOFT COAL FORGE.
With or Without Hood.
Revolving Tuyere.

Complete with
Coal and Water
Box.

Cast Hood.
Fig. 2040.



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PRICES.**

DONEGAN AND SWIFT,
6 Murray Street, New York.

Fig. No.	2036	2037	2038	2039	2040
Height, Inches	26	26	26	25	31
Size of Hearth, Inches	39x32	38x31	38x31	24x25	28x45
Diameter of Fan, Inches	16		10	11	
Weight, with Tank, Lbs.	125	400	500		
Weight, without Tank, Lbs.			150	310	
Price, Without Tank			\$45.00	\$55.00	\$20.00
Price, With Tank	\$85.00	\$55.00			\$30.00

cast iron
hood
8.00
extra.
\$30.00

DONEGAN AND SWIFT, 6 Murray Street, New York.

SWIFT'S CRANK AND LEVER BLOWER,

FOR BLACKSMITH AND WHEELWRIGHT.

CRANK HAND BLOWER.

Wood Frame.

Fig. 2041.



HAND BLOWER.

Iron Frame and Stand.

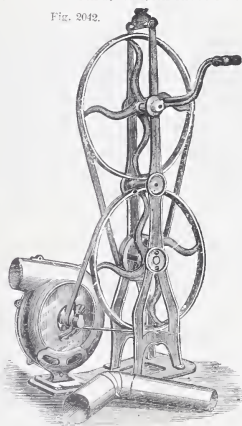
Fig. 2045.



WITH BLAST WHEEL.

Closed on both sides with Sheet Steel.

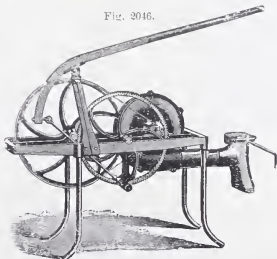
Fig. 2042.



HAND BLOWER.

With Tuyere, Lever Ratchet Movement Iron Frame.

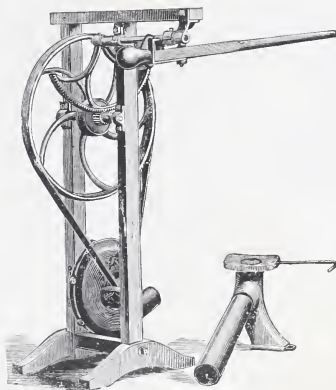
Fig. 2046.



BLACKSMITH TYPE.

With or without Tuyere, Wood Frame.

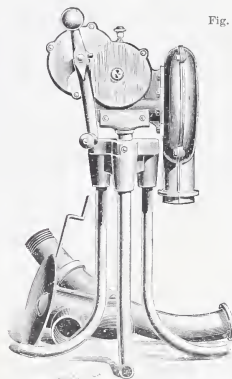
Fig. 2043.



STEEL BLOWER, BALL BEARING CRANK.

Turns Right or Left. Adjustable High or Low.

Fig. 2044.



WRITE FOR OUR SPECIAL LOW PRICES.

**DONEGAN
and
SWIFT,**
6 Murray St.,
NEW YORK.

BLACKSMITH
LEATHER BELLOWS.
Ordinary and Extra Long.

Fig. 2047.

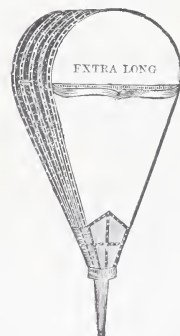


Figure No	2041	2042	2043	2046	2045	2044
Height.....Inches	47	44	48	47	35	72
Size of Face.....Inches	14	14	16	14	17	12
Weight, with Tuyere.....Lbs.	135	160	180	130	225	100
Price, without Tuyere.....	\$18.00	20.00	23.00	34.00	26.00	.....
Price, with Tuyere.....	\$20.00	22.00	20.00	25.00	36.00	28.00

BELLOWS.—Fig. 2047.

Size, inches.....	18	24	26	28	30	32	34	36	38	40	42	44	50
Price, standard.....	\$10.00	10.00	11.00	12.00	13.00	14.00	16.00	18.00	20.00	23.00	27.00	32.00	.....
Price, extra long.....	.....	12.00	13.00	14.00	15.00	17.00	19.00	21.00	24.00	28.00	34.00	40.00	60.00

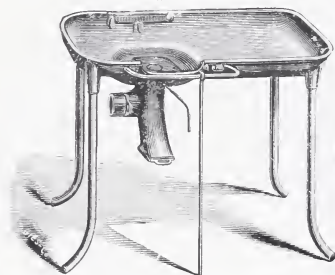
DONEGAN AND SWIFT,

6 MURRAY STREET, NEW YORK.

Swift's Portable Blast Forge, for Hand and Power Blower, FOR BLACKSMITH, CARRIAGE BUILDER, CONTRACTOR and MACHINIST.

FORGE, WITH BLAST GATE AND
TONG REST.

Fig. 2018.



WITH BLAST GATE, WATER TANK, COAL BOX AND TONG REST.

Fig. 2049.

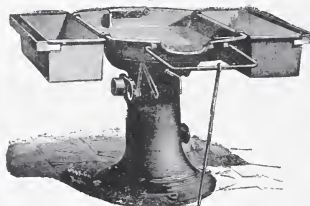
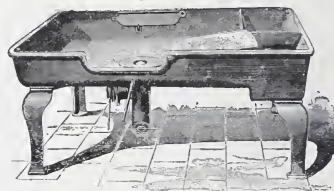


Fig. 2050.



Fig. 2051.



WRITE FOR OUR SPECIAL LOW PRICES.

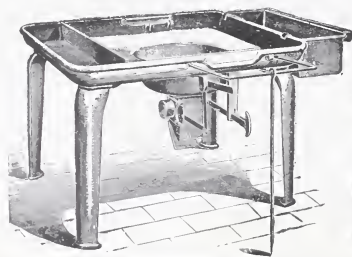
Donegan and Swift,

6 Murray St., New York.

BLAST FORGE, WITH ANTI-CLINKER DUMPING TUYERE, BLAST GATE, WATER TANK, COAL BOX & TOOL RESTS.

SINGLE TUYERE—Cast Legs.

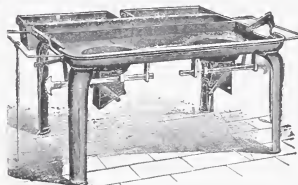
Fig. 2052.



DOUBLE TUYERES.

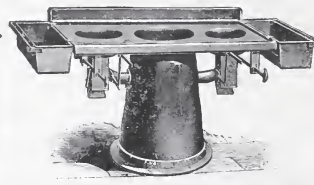
Cast Legs.

Fig. 2053.



Steel Body.

Fig. 2054.



FOUR-FIRE TYPE.
Base of Heavy Steel Plate.

Fig. 2055.

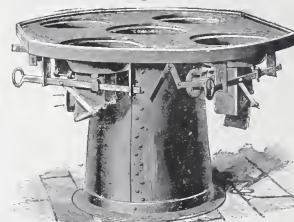


Figure No.	2048		2049		2050	2051	2052	2053	2054	2055
Height	30 1/2	33	33	29	26 1/2	26 1/2	26 1/2	37 1/2	27	30
Size of Hearth	21x27 1/2	20 1/2 x 38 1/2	26 1/2 x 38 1/2	24 x 36 1/2	38 x 42	38 x 42	46 1/2 x 47	37 x 41	23 x 51	24 x 54
Weight	89	140	270	330	412	435	722	447	570	585
Price	Complete	\$15.00	20.00	34.00	40.00	45.00	70.00	40.00	75.00	80.00
										125.00

DONEGAN AND SWIFT, 6 MURRAY ST., NEW YORK.

SWIFT'S PORTABLE BLAST FORGE, FOR POWER AND BLOWER.

WITH DOWN DRAFT SMOKE EXHAUST HOOD, ANTI-CLINKER DUMPING TUYERE, BLAST GATE, ETC.

WITH COMBINED BLOWER
AND EXHAUSTER.

Fig. 2056.



STEEL HOODS WITH COAL AND WATER BOXES, FOR CARRIAGE, WAGON, SMITHSHOPS, ETC.

Fig. 2057.

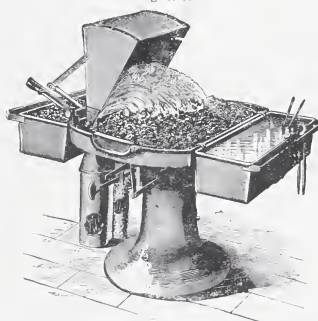
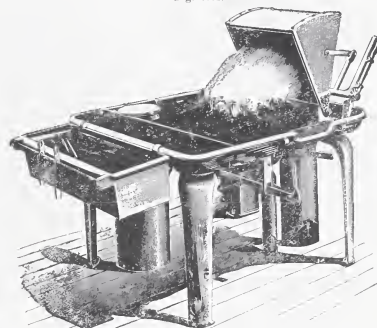


Fig. 2058.



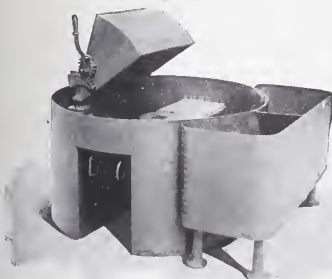
WRITE
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SPECIAL
LOW PRICES.

DONEGAN
and
SWIFT,
6 Murray St.,
New York.

DOWN DRAFT SMOKE EXHAUST HOOD,
ANTI-CLINKER DUMPING TUYERE
COAL AND WATER BOXES.

Steel Body.

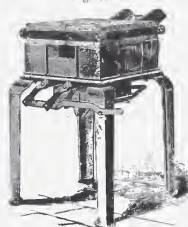
Fig. 2059.



STATIONARY HEATING FORGE, FOR BLAST, FOR HARD COAL AND COKE, SHOWING FIRE BRICKS
WHICH ARE FURNISHED AT AN EXTRA COST.

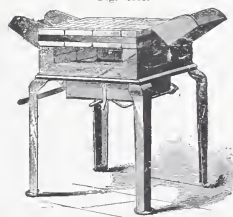
With Blast Gate.

Fig. 2060.



Two Grates and Blast Gate.

Fig. 2061.



With Four Grates and Two Blast Gates.

Fig. 2062.

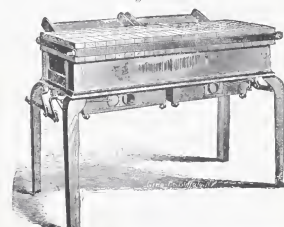


Figure No.	2056	2057	2058	2059	2060	2061	2062
Height.....Inches	24	29	27½	26	26		
Hearth.....Inches	28x50	24x36½	37x41	36 Dia.	36 Dia.		
Grate Surface.....Inches					8x10	12x12	13½x22
Weight.....Lbs.		470	550	430	410	12x20	8x22
Price.....	\$70.00	65.00	70.00	70.00	100.00	35.00	45.00
						60.00	60.00
						55.00	75.00
							75.00
							90.00
							110.00

DONEGAN AND SWIFT, 6 MURRAY STREET, NEW YORK.

SWIFT'S ROTARY POSITIVE BLOWER AND FORGE, FOR FORGE FIRES, FOUNDRIES AND AIR BLAST.

HAND BLOWER,
For Blacksmiths' Work
or Ventilation.

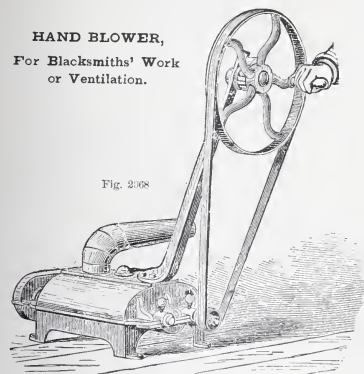


Fig. 2068

LINK CHAIN AND POWER,
Guaranteed to Give Blast
Equal to a 60-inch
Bellows.

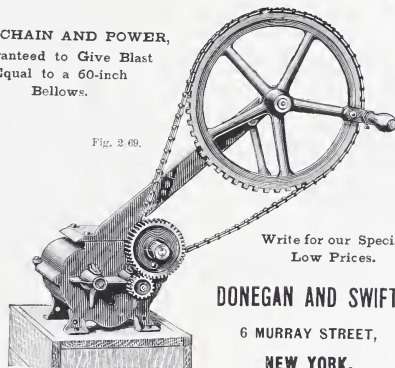


Fig. 2 69.

Write for our Special
Low Prices.

DONEGAN AND SWIFT,
6 MURRAY STREET,
NEW YORK.

LINK BELT AND POWER,
For Blacksmiths' Work.

Will Heat in One-Half the
Time Required for
Bellows or Fan.

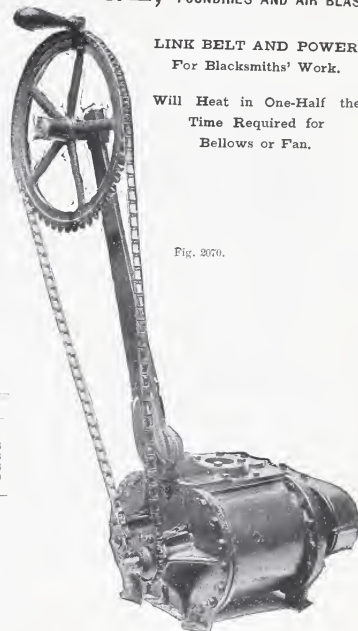


Fig. 2070.

PORTABLE FORGE, FITTED WITH BLOWER,
LINK CHAIN AND DRIVING WHEEL.

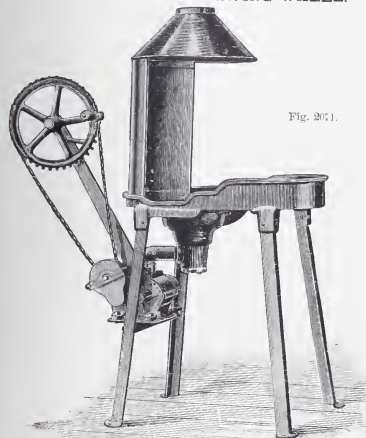


Fig. 2071.

Figure No.	2068	2069	2070	2072 and 2073
Capacity per revolution, cubic inches	144	288	172	325
Diameter of outlet, inches	11½	2	2	1½
Weight, lbs.	75	100	75	83
Price	\$80.00	35.00	30.00	60.00

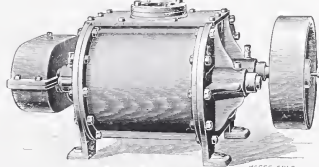
PORTABLE FORGE, Figure 2071.

Size Hearth.	Size Bellows equal to	*Weight.	Price.
21½x13 inches	30 inches	145 lbs.	\$33.00
34 x16 "	40 "	170 "	37.00
20 x30 "	50 "	250 "	41.00
37½x25 "	60 "	300 "	45.00
46½x31 "	.....	.....	53.00

* In shipping order.

Bottom Suction, Top Discharge.

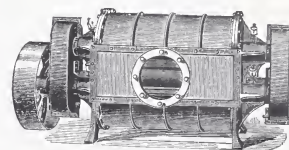
Fig. 2072.



FOUNDRY POWER BLOWER.

Side Suction and Discharge.

Fig. 2073.

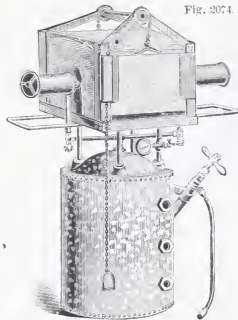


Donegan and Swift, . . . 6 Murray St., New York.

PORTABLE AND STATIONARY FORGE, FOR BLACKSMITH AND CONTRACTOR.

KEROSENE RIVET FORGE.

Fig. 2074.

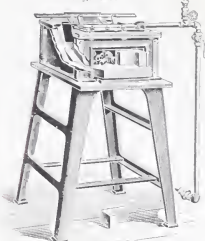


Price, \$75.00.

GAS RIVET HEATER.

Capacity, 500 Rivets per hour.

Fig. 2075.



Front entrance: 9 ins. wide, 3 ins. high.

Capacity about 40 lbs. per charge, heating at rate of one 3/4-inch rivet per minute. Smaller size proportionately quicker.

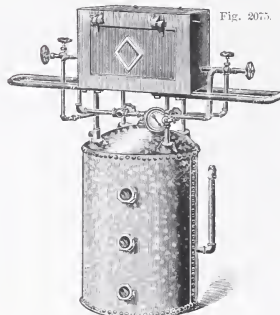
Floor space: 25 x 26 inches. Weight net: about 413 lbs.

Price, \$100.00.

CRUDE OIL RIVET FORGE,

With Sliding Doors.

Fig. 2076.



This size requires a supply of compressed air to actuate the burners. Price, \$80.00.

WRITE FOR OUR SPECIAL LOW PRICES.

DONEGAN AND SWIFT,
6 Murray Street, New York.

GAS FORGE.

For Drop Forging.

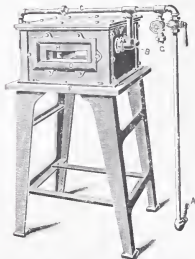


Fig. 2078.

No. 1. No. 2.
Floor space: 20x24 ins. 36x26 ins.

Heating space: 6 in. deep, 14 in. deep.

Entrance: 6x3 ins. 11x3 ins.

Weight: 460 lbs. 750 lbs.

Price: \$50.00. \$100.00.

Gas consumption per hour, about 120 cubic feet.

RIVET FORGE, STYLE R.

For Fuel Oil or Kerosene. Always under the control of the Operator. Consumes about one gallon per hour.

Fig. 2076.



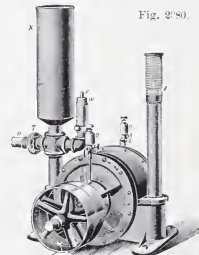
Capacity, 500 Rivets per hour.

Price, \$110.00.

A POSITIVE PRESSURE BLOWER.

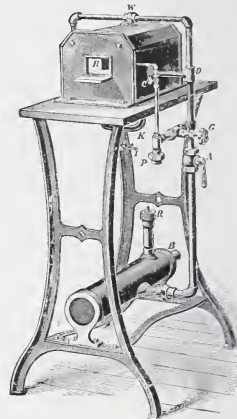
Noiseless, Reliable, Power Saving.

Fig. 2080.



GAS FORGE.

Fig. 2077.



Entrance: 3 ins. wide by 2 ins. high.
Depth of heating space: 4 inches.
Floor space: 20 x 24 inches.
Weight: 275 lbs.

Price, \$35.00.

Fig. 2080.
1/2 to 2 lbs. Pressure.

Size.	Capacity in Cubic Inches.	Speed Revolutions per Minute.	Size of Pulleys.	Price.
1	450	250	11 x 2	\$75.00
2	675	250	11 x 2	100.00
3	1,320	200	15 x 3	150.00
4	1,980	200	15 x 3	215.00
5	3,564	190	20 x 3	320.00
6	5,346	190	20 x 3	425.00

Unsurpassed for a Reliable Blower.

DONEGAN AND SWIFT, 6 MURRAY STREET, NEW YORK.

SWIFT'S PRESSURE BLOWERS.

FOR CUPOLA AND FORCE FIRES.

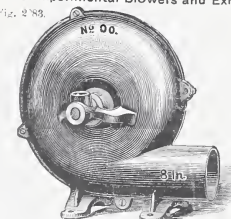
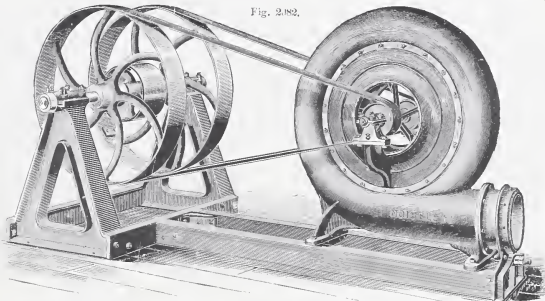
Swift's Steel Pressure Blower, combined with Countershaft, on Adjustable Bed.

Swift's Experimental Blowers and Exhausters.

Fig. 2081.

Fig. 2082.

Fig. 2083.



No.	Outside Dia. of Outlet.	Height.	Weight.	Pulleys Dia. Face	Price.
00	2 1/2	8 in.	30 lbs.	1 1/2	\$8.00
0	3	12 "	30 "	1 1/2	10.00
1/2	4 1/2	18 "	45 "	1 1/2	11.00

Swift's Fan System of Heating, Ventilating and Drying.

Swift's Improved Countershafts for Steel Pressure Blowers.

Swift's Blast Gates for Pressure Blowers and Air Conveying Pipes.

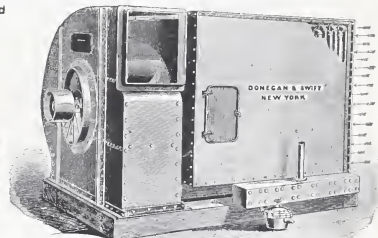
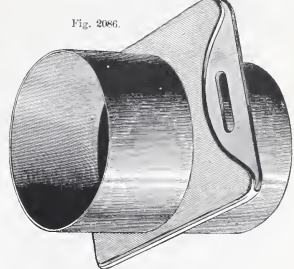
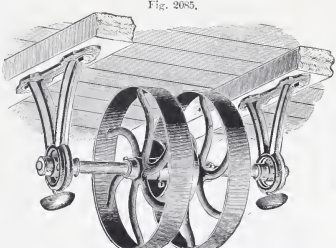
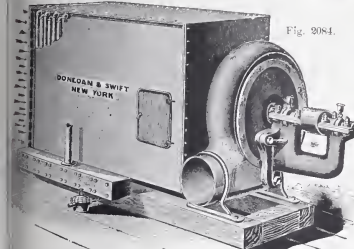
Swift's Fan System of Heating, Ventilating and Drying.

Fig. 2084.

Fig. 2085.

Fig. 2086.

Fig. 2087.



Left Hand Horizontal Discharge, Steel Plate Pulley Exhaust Fan, Drawing Through Heater.

Right Hand Horizontal Discharge "B" Volume Exhaust Pulley Fan, Drawing Through Heater. Pressure Blower Figs. 2081 and 2082.

Swift's Fan System Apparatus with "B" Volume Exhaust Fan, Fig. 2084.

Swift's Fan System Apparatus with Steel Plate Exhaust Fan. Fig. 2087.

Swift's Fan System Apparatus with Steel Plate Exhaust Fan. Fig. 2087.

Blower.	Height in inches	Diameter of Outlet.	Diameter of Pulley.	Face of Pulley.	Price without Countershaft.	Price with Countershaft.	Adjustable Bed.
12 1/2	3 1/2	2 1/2	1 1/2	1 1/2	\$12.00	\$20.00	
15	4	3	1 3/4	1 3/4	18.00	28.00	
20	4 1/2	3 1/2	2	2	26.00	38.00	
24	5	4	2 1/4	2 1/4	35.00	52.00	
28	5 1/2	4 1/2	2 3/4	2 3/4	44.00	64.00	
30	6	5	3	3	55.00	80.00	
35	6 1/2	5 1/2	3 1/2	3 1/2	70.00	100.00	\$100.00
40	7	6	4	4	90.00	130.00	175.00
45	7 1/2	6 1/2	4 1/2	4 1/2	115.00	170.00	230.00
50	8	7	5	5	160.00	230.00	350.00
55	8 1/2	7 1/2	5 1/2	5 1/2	225.00	300.00	435.00
60	9	8	6	6	275.00	350.00	500.00
65	9 1/2	8 1/2	6 1/2	6 1/2	325.00	400.00	575.00
70	10	9	7	7	400.00	475.00	625.00

Size of Fan.	Diameter of Inlet.	Price of Fan.	Price of Pulley.	Price of Countershaft.	Price of Fan and Countershaft.
12 1/2	3 1/2	\$12.00	\$2.00	\$5.00	\$19.00
15	4	18.00	3.00	7.50	28.50
20	4 1/2	26.00	4.00	10.00	40.00
24	5	35.00	5.00	12.50	52.50
28	5 1/2	44.00	6.00	15.00	65.00
30	6	55.00	7.00	17.50	80.00
35	6 1/2	70.00	8.00	20.00	98.00
40	7	90.00	9.00	22.50	121.50
45	7 1/2	115.00	10.00	25.00	150.00
50	8	160.00	11.00	27.50	198.50
55	8 1/2	225.00	12.00	30.00	267.00
60	9	275.00	13.00	32.50	310.50
65	9 1/2	325.00	14.00	35.00	354.00
70	10	400.00	15.00	37.50	432.50

Size of Fan.	Diameter of Inlet.	Price of Fan.	Price of Pulley.	Price of Countershaft.	Price of Fan and Countershaft.
12 1/2	3 1/2	\$12.00	\$2.00	\$5.00	\$19.00
15	4	18.00	3.00	7.50	28.50
20	4 1/2	26.00	4.00	10.00	40.00
24	5	35.00	5.00	12.50	52.50
28	5 1/2	44.00	6.00	15.00	65.00
30	6	55.00	7.00	17.50	80.00
35	6 1/2	70.00	8.00	20.00	98.00
40	7	90.00	9.00	22.50	121.50
45	7 1/2	115.00	10.00	25.00	150.00
50	8	160.00	11.00	27.50	198.50
55	8 1/2	225.00	12.00	30.00	267.00
60	9	275.00	13.00	32.50	310.50
65	9 1/2	325.00	14.00	35.00	354.00
70	10	400.00	15.00	37.50	432.50

Size of Fan.	Diameter of Inlet.	Price of Fan.	Price of Pulley.	Price of Countershaft.	Price of Fan and Countershaft.
12 1/2	3 1/2	\$12.00	\$2.00	\$5.00	\$19.00
15	4	18.00	3.00	7.50	28.50
20	4 1/2	26.00	4.00	10.00	40.00
24	5	35.00	5.00	12.50	52.50
28	5 1/2	44.00	6.00	15.00	65.00
30	6	55.00	7.00	17.50	80.00
35	6 1/2	70.00	8.00	20.00	98.00
40	7	90.00	9.00	22.50	121.50
45	7 1/2	115.00	10.00	25.00	150.00
50	8	160.00	11.00	27.50	198.50
55	8 1/2	225.00	12.00	30.00	267.00
60	9	275.00	13.00	32.50	310.50
65	9 1/2	325.00	14.00	35.00	354.00
70	10	400.00	15.00	37.50	432.50

Size	Material	Price	Size	Material	Price
2 - inch	Cast iron with steel slide	\$1.00	10 - inch	Cast iron with steel slide	\$5.00
3 - "	"	1.50	12 - "	"	6.00
4 - "	"	2.00	14 - "	"	7.00
5 - "	"	2.50	16 - "	"	8.00
6 - "	"	3.00	18 - "	"	9.00
8 - "	"	4.00	20 - "	"	10.00
10 - "	"	5.00	24 - "	"	12.00
12 - "	"	6.00	30 - "	"	15.00
14 - "	"	7.00	36 - "	"	18.00
16 - "	"	8.00	42 - "	"	21.00

Nos. 1 to 6 regularly have one driving pulley, Nos. 7 to 12 have two driving pulleys. Additional pulleys, also tight and loose pulleys may be furnished on these countershafts at a small additional price.

DONEGAN & SWIFT 6 Murray Street, New York.

SWIFT'S BLOWERS AND EXHAUSTERS

FOR FORCES, FURNACES, INDUSTRIAL, DRYING AND COOLING.

STEEL PLATE FAN AND EXHAUST FANS FOR SAW MILLS AND HEATING SYSTEMS.

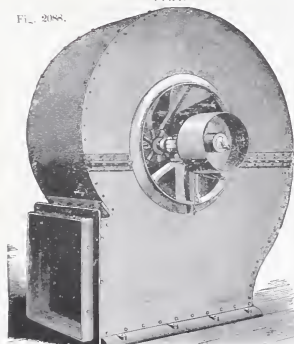
FAN.

SHOWING SUCTION SIDE.

SHOWING PULLEY SIDE, Shell Closed.

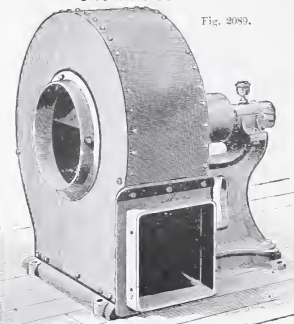
DOUBLE EXHAUST, Pulley in Centre

Fig. 2084.



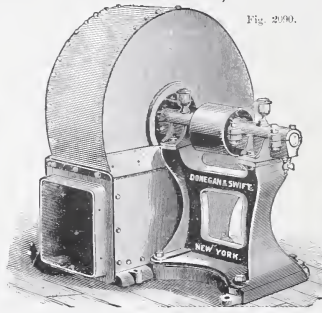
HORIZONTAL DISCHARGE.

Fig. 2089.



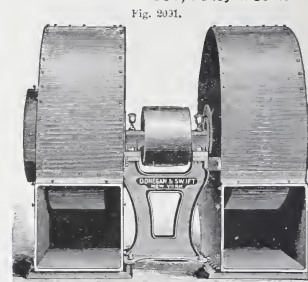
UP DISCHARGE.

Fig. 2090.



HORIZONTAL DISCHARGE.

Fig. 2091.



UP DISCHARGE.

CAST SHELL FANS AND EXHAUSTERS. "B" EXHAUSTERS

Fig. 2092.

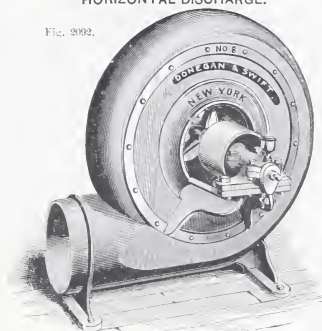


Fig. 2093.

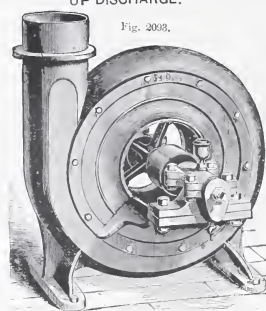


Fig. 2094.

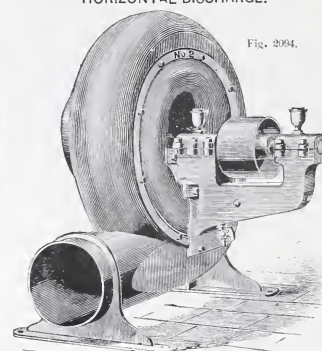
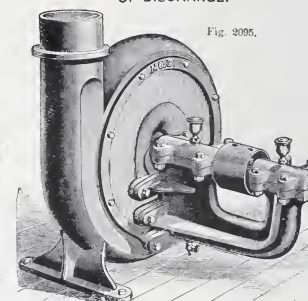


Fig. 2095.



Figs. 2088 to 2091. FANS WITH STEEL PLATE SHELL SINGLE AND DOUBLE EXHAUST FANS.

Figs. 2092 To 2095. "B" BLOWERS AND EXHAUSTERS.

Sizes.	Diam. Inlets.	Size of Outlets.	Single Fan Pulleys.		Price of Single Fans	Double Fan Pulleys.		Price of D'ble Fans.		No. of Blower or Exhauster.	Height in Inches.	Diameter of Outlet.	Diameter of Inlet.	Diameter of Pulley	Face of Pulley.	PRICE.
			Diam.	Face.		Diam.	Face.									
30 inch.	11 1/4	9 1/4 x 9 1/4	7	4 1/2	\$55.00	8	7	\$70.00	1	1 B	5	5	5	2 1/2	2	\$20.00
35 "	13	11 1/4 x 11 1/4	7	5 1/2	70.00	9	8	100.00	3	3 B	25	7 1/2	7 1/2	3 1/4	2 1/2	25.00
40 "	15	13 1/4 x 13 1/4	8	6	90.00	10	9	130.00	4	4 B	29	9	9	4	3 1/4	33.00
45 "	17 1/4	15 x 15	9	6 1/2	115.00	11	10	150.00	5	5 B	32	10 1/4	10 1/4	4 1/2	4	44.00
50 "	19	16 1/2 x 16 1/2	10	7	150.00	12	11	210.00	6	6 B	37 1/2	12	12	5 1/2	4 1/2	55.00
55 "	21	18 x 18	11	8	185.00	13	11	275.00	7	7 B	43	14	14	6 1/2	5 1/2	70.00
60 "	23 1/2	19 1/2 x 19 1/2	11 1/2	8 1/2	200.00	14	12	325.00	8	8 B	48	16	16	8 1/2	6 1/2	112.00
70 "	25	21 1/2 x 21 1/2	12	10	250.00				9	9 B	55	18	18	9 1/2	8 1/2	145.00
									10	10 B	68	21	21	12	10	225.00

ILLUSTRATIONS SHOW PULLEYS ON RIGHT SIDE FACING OUTLET.

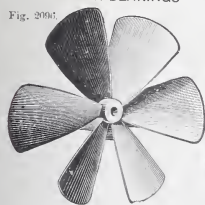
IN ORDERING STATE WHETHER PULLEY IS TO BE ON RIGHT OR LEFT SIDE FACING OUTLET.

DONEGAN & SWIFT, 6 Murray Street, New York.

SWIFT'S VENTILATING EXHAUST WHEELS.

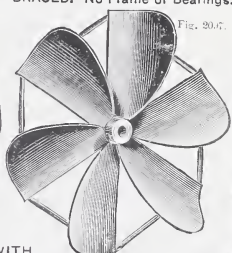
FAN WITHOUT
FRAME OR BEARINGS

Fig. 2094.



FAN WITH BLADES
BRACED. No Frame or Bearings.

Fig. 2095.



FANS WITH FLOOR HANGERS AND PULLEYS
EXTRA HEAVY, BLADES BRACED.

Fig. 2098.

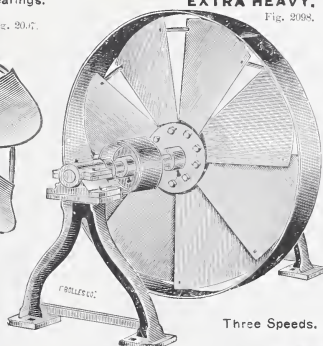
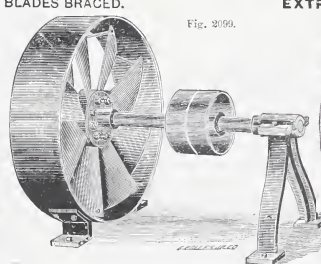
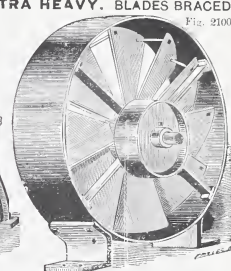


Fig. 2099.



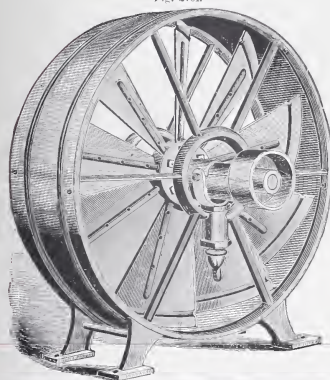
FAN WITH LEGS
EXTRA HEAVY, BLADES BRACED.

Fig. 2100.



FAN WHEEL WITH
ADJUSTABLE BLADES AND BEARINGS.

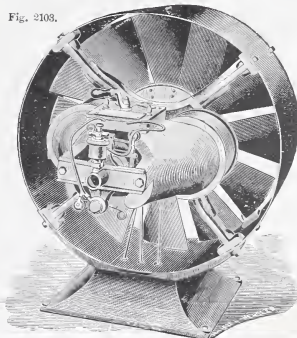
Fig. 2101.



SWIFT'S DISC WHEEL
WITH ELECTRIC-MOTOR
ATTACHED.

Three Speeds. In ordering state voltage.

Fig. 2103.



SWIFT'S DISC WHEEL IN FRAME.

Fig. 2104.

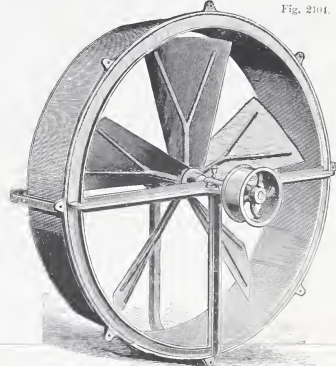
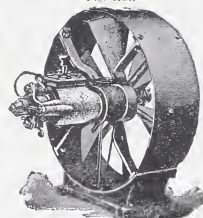


Fig. 2102.



FOR PLACING WALL OR
WINDOW ON SHELF.

DIAMETER.		12	15	18	24	30	36	42	48	54	60	72	84
FAN Fig. 2096	.....	\$ 9.00	\$10.00	\$12.00	\$14.00	\$20.00	\$25.00	\$32.00	\$40.00	.....	.....	.....	.....
FAN " 2097	.....	10.00	12.00	14.00	16.00	.....	.....	.....	.....	.....	.....	.....	.....
FAN " 2098	.....	.....	.....	.....	43.00	.....	32.00	61.00	.....	.....	.....	.....	.....
FAN " 2099	.....	.....	.....	.....	47.00	.....	37.00	67.00	.....	.....	95.00	.....	.....
FAN " 2100	.....	.....	.....	.....	49.50	.....	9.50	100.00	68.50	.....	100.00	.....	.....
FAN " 2101	.....	20.00	.....	35.00	45.00	60.00	80.00	100.00	120.00	\$150.00	100.00	.....	.....
FAN " 2102	.....	.....	.....	.....	270.00	330.00	400.00	400.00	600.00	800.00	900.00	.....	.....
FAN " 2103	.....	.....	.....	.....	270.00	320.00	400.00	520.00	600.00	800.00	900.00	.....	.....
FAN " 2104	.....	.....	.....	.....	50.00	65.00	85.00	110.00	125.00	175.00	250.00	\$300.00	\$350.00
REV.	.....	1000	1000	1000	1200	600	600	500	500	400	400	300	300
SIZE PULLEY	.....	.....	.....	4 x 2	4 x 2	6 x 2	7 x 3	8 x 3½	9 x 4	9 x 4	10 x 5	12 x 5½	14 x 6

DONEGAN & SWIFT, 6 Murray Street, New York.

SWIFT'S VENTILATING WHEEL FAN, STEEL BLADES,

For Exhausting and Open Air Delivery, Removal of Heat, Impure Air, Steam and Dust from Hospitals, Churches, Schools, Factories, Laundries, and Blacksmiths' Forges and Furnaces.

FOR BELT POWER.

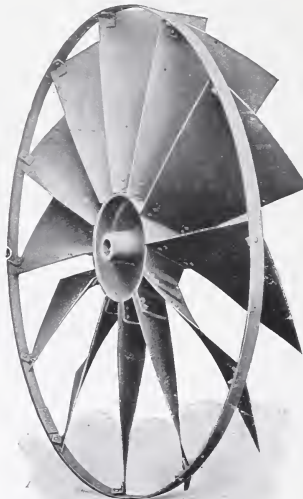
With Pulley, Self-Oiling Journal Bearings, made to be placed in any position.

Fig. 2105

Write for Our Special Low Prices.

FAN SPIDER.

Set in angle for exhaust. Blades riveted to circle ring for safety.



ELECTRIC MULTIPOLAR MOTOR.

Attached to center of Wheel and Shell ready for wire.

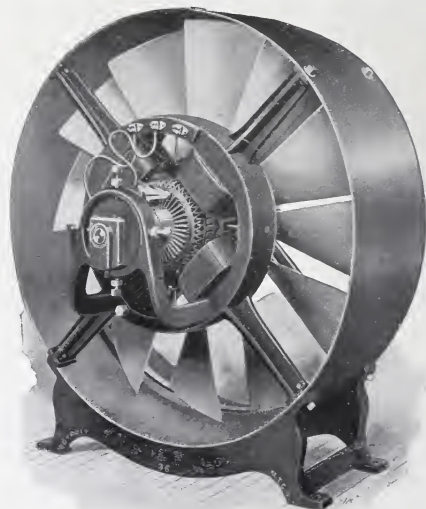


Fig. 2106.

OPEN AIR DELIVERY.

Size in Inches	Horse Power	Cubic Ft. of Air Exhausted Per Minute	Approximate Speed	Fig. 2105 Price	Fig. 2107 Price
18	.75	4400	1,400	\$22 00	\$100 00
24	1.	8792	1,000	30 00	130 00
30	1.40	13740	800	34 00	180 00
36	2.25	20290	700	45 00	235 00
42	3.30	29036	550	59 00	300 00
48	4.	31168	500	77 00	340 00
54	4.5	44520	450	95 00	380 00
60	5.	48093	350	110 00	575 00
72	6.	59322	300	118 00	650 00
84	special	107744	300	320 00	special
96	"	140728	300	375 00	"
108	"	178080	225	325 00	"
120	"	219640	200	380 00	"

Motors are wound for 125, 250 and 500 volt circuits. Motors wound for 500 volts 5% extra.

All Fan Motor Series wound in sizes to 72 inches.
Automatic Release Starting Boxes furnished with each motor Fan. Always state voltage.

Fig. 2106.

SIZES OF FANS.

Air Velocity in Feet Per Minute		18"	24"	30"	36"	42"	48"	54"	60"	72"	84"	96"	108"	120"
750	Cubic feet.....	1478	2920	4116	5030	5981	10550	13874	16489	23747	30323	56218	53561	66444
	R. P. M.....	415	300	250	200	175	150	150	135	100	100	100	100	65
	I. H. P.....	.08	.06	.10	.15	.39	.34	.40	.30	.50	.90	1.17	1.50	1.70
1100	Cubic feet.....	1912	3556	6615	8895	12121	15826	20034	24734	35620	51284	64927	80150	98010
	R. P. M.....	620	450	400	330	250	225	200	175	150	150	125	100	100
	I. H. P.....	.06	.14	.22	.38	.45	.60	1.00	.95	1.40	2.00	2.80	4.00	5.00
1500	Cubic feet.....	2640	5775	8232	11861	16162	21100	26712	34678	47494	64646	84477	112420	131836
	R. P. M.....	850	600	500	400	350	300	275	250	200	175	150	150	125
	I. H. P.....	.10	.20	.40	.66	1.00	.90	1.50	2.10	2.50	4.00	4.75	7.5	7.00
1875	Cubic feet.....	3300	6594	10250	15885	20292	28276	34790	41223	55927	81144	106746	134900	164960
	R. P. M.....	1050	700	600	500	450	400	350	300	250	225	200	175	150
	I. H. P.....	.30	.5	.73	1.10	1.67	2.25	3.30	3.85	7.5	10.50	11.25	12.00	12.00
2500	Cubic feet.....	4400	8792	13720	20230	29536	34168	44320	54964	70156	107741	140738	178380	219640
	R. P. M.....	1400	1000	800	700	550	500	450	400	350	300	250	225	200
	I. H. P.....	.75	1.00	1.40	2.25	3.30	4.00	4.5	6.00	7.00	10.00	13.5	20.00	28 00

Cub. Ft.—Quantity of air propelled per minute.

R. P. M.—Revolution of fan per minute.

I. H. P.—Horse power to operate fan.

Motor Formula—V x A = Watts.

745 Watts—E. H. P.

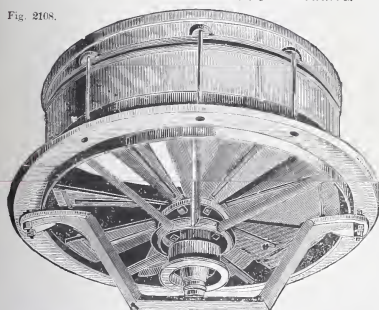
For I. H. P. add 30 per cent.

DONEGAN AND SWIFT, 6 MURRAY STREET, NEW YORK.

**HOT AND COLD AIR DRYERS FOR DRYING
TOBACCO, WOOL, COTTON, PAPER, PLASTER
BOARD, AND HEATING BUILDINGS.**

FAN WITH FRAME AND BOTTOM BEARING.

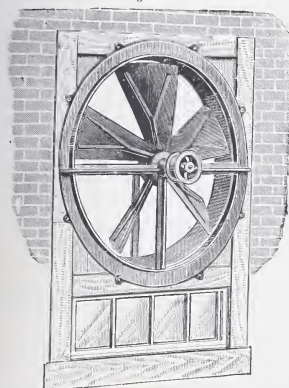
Fig. 2108.



To be driven in Upright Position in Cupola or Upright Pipe.
Price List, Page 281

FAN WITH FRAME WINDOW OR WALL.

Fig. 2111.



Showing Wheel placed inside of Window Frame.
Discharging outside of Building.

Price List, Page 281

PIPE COIL USED WITH FAN AND CASING ATTACHED.

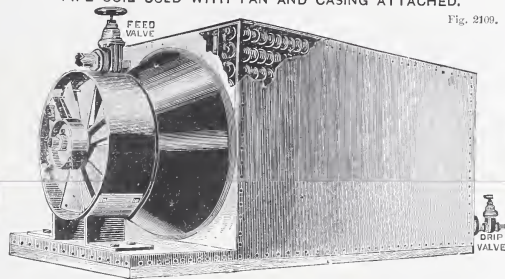


Fig. 2109.

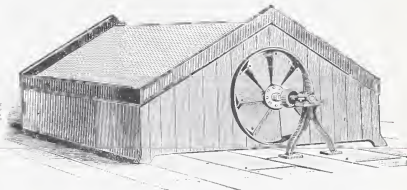


Fig. 2110.

Represents our Cold Air Wool and Cotton Dryer, equipped with Fan. Price made according to size Wheel required and number Feet Pipe and Heating Surface.

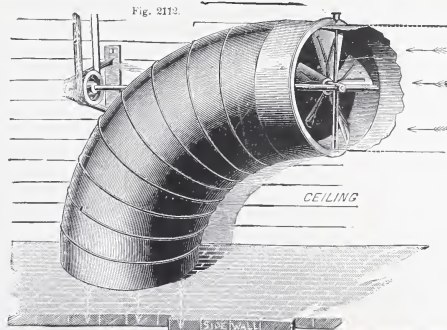
DONEGAN & SWIFT,
6 MURRAY ST., - NEW YORK.

THE SWIFT FAN WHEEL AS APPLIED FOR EXHAUSTING
FROM AND THROUGH PIPES.

Fan Wheel Fastened to Ceiling discharging to Outside of Building through Elbow.

In the application of our Disk Wheels for their various uses, it is often desired to convey Foul Air, Gas, Steam, etc., from an inner room or section of building through pipe to outside of building. We show in the following diagrams the manner of connecting Wheel to Pipe as may best suit the location of power for driving same.

Fig. 2112



Prices made according to size Fan and amount of Pipe to be used, to remove a given quantity of Air

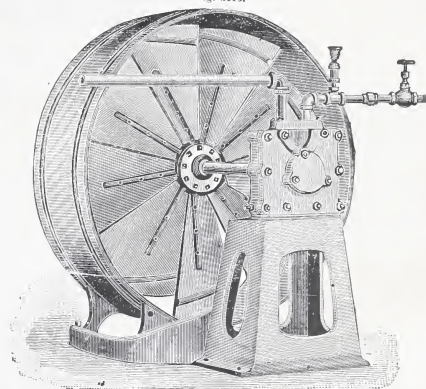


Fig. 2113.

SIZE	24 inch Fan and Engine		PRICE
24	33	33	\$155 00
30	38	33	170 00
36	48	33	200 00
42	58	33	220 00
48	68	33	270 00
54	78	33	300 00

DONEGAN & SWIFT, = 6 MURRAY STREET, = NEW YORK.

SWIFT'S ELECTRIC FAN MOTORS, DIRECT AND ALTERNATING,

For Desk, Counter, Table or Shelf.

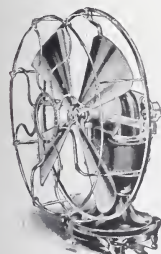


Fig. 2131.

Nickel or Brass Fan and Guard.

With Regulating Switch.

3 SPEEDS.

Direct or Alternating.

Rigid or Adjustable Base.

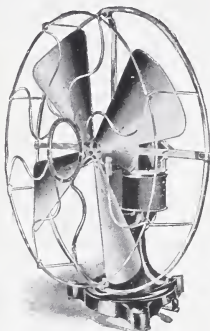


Fig. 2132.

DONEGAN
AND
SWIFT

6 Murray St.,
N. Y.

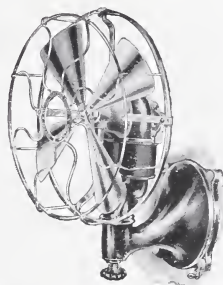


Fig. 2133.

For
Bracketing
to Wall.

Nickel or Brass Fan and Guard.

With Regulating Switch.

3 SPEEDS.

SELF-OILING.

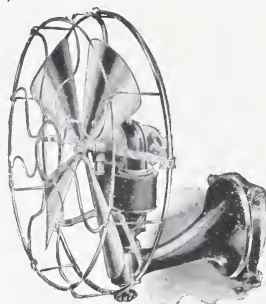


Fig. 2134.

CEILING FAN MOTORS.

Bronze, Nickel or Brass.

WRITE
FOR OUR
SPECIAL LOW
PRICES.

With Regulating
Switch.

Fig. 2126.—For Ceilings over 12 ft. high, add 50 cents to list for each additional 6 in.

Fig. 2125.—For Ceilings over 14 ft. high, add \$1.00 per ft. extra.



Fig. 2125.—ALTERNATING CURRENT.

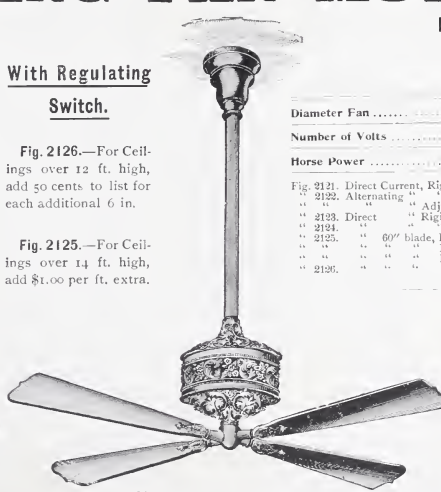


Fig. 2126.—DIRECT CURRENT.

Diameter Fan	10	10	12	12	12	14	14	16	16	16
Number of Volts	52	104	52	104	110	52	104	110	220	500
Horse Power	1	1	1	1	1	1	1	1	1	1
Fig. 2121. Direct Current, Right, each										
" 2122. Alternating " " Adjustable,	25.00	25.00				34.00	35.00		43.00	50.00
" 2123. Direct " " Rigid,			30.00	30.00						
" 2124. " " " Rigid,					34.00				43.00	50.00
" 2125. " 60" blade, Bronze,	50.00	50.00								
" " " " Nickel,	54.00	54.00								
" " " " Brass,	60.00	60.00								
" 2126. " " " " "								45.00	55.00	63.00

Chandelier and Incandescent Light
Attachments to Ceiling Fans,
Extra.

Write for our Special Low Prices.

DONEGAN & SWIFT. 6 MURRAY ST., · NEW YORK.

SWIFT'S BLACKSMITH TONGS, BOLT CLIPPERS AND PINCERS.

PLAIN AND FANCY TONGS, from 14 to 30 Inches in Length.

Straight Lip.
Fig. 2127.



.30

Gad.
Fig. 2128.



.40

Double. Pickup. Single.
Fig. 2129.



.40

Fig. 2130.



Rivet.
Fig. 2131.



.60

Curved Lip.
Fig. 2132.



.30

Round Jaw.
Fig. 2133.



.40

Angle Jaw.
Fig. 2134.



.60

Band.
Fig. 2135.



.60

Blacksmith Clip.
Fig. 2136.



1.20

Lathe Tool.
Fig. 2137.



.60

Pick.
Fig. 2138.



.60

Bolt.
Fig. 2139.



.40

PRICE Per Lb.

SOLID STEEL FULLY POLISHED.

Clinch Tongs.
Fig. 2140.



Fig. 2141.



Hoof Prer.
Fig. 2142.



Hoof Shear.
Fig. 2143.



Cutting Nippers.
Fig. 2144.



Fig. 2145.



Pincers.
Fig. 2146.



Fig. 2147.



Forging Tong.
Fig. 2148.



Bolt Clippers.
Fig. 2149.



Fig. 2150.



CLINCH NIPPER.
Adjustable Jaws.
10 inch, \$19.20 Per Doz.
12 inch, 24.00 Per Doz.
Fig. 2151.

WRITE FOR OUR
SPECIAL LOW
PRICES.

DONEGAN
AND
SWIFT,
6 MURRAY ST.,
NEW YORK.

Round and Straight Ends.
Per Dozen, \$26.40.

Per Doz.
14 inch, \$28.80 Per Doz., \$28.80
12 inch, 24.00

14 inch, \$28.80 Per Doz.
12 inch, 24.00 "
10 inch, 19.20 "
8 inch, 14.40 "

12 inch, \$24.00 Per Doz.
14 inch, 28.80 "
16 inch, 30.00 "

12, 14 and 16
inch.
Per Doz, \$6 00.

No. 1, cuts $\frac{5}{8}$ inch bolts, \$ 6.67 each.
No. 2, cuts $\frac{3}{4}$ inch bolts, 8.89 each.
No. 3, cuts $\frac{7}{8}$ inch bolts, 16.66 each.
No. 4, cuts $1\frac{1}{4}$ inch bolts, 22.22 each.

DONEGAN AND SWIFT, 6 MURRAY ST., NEW YORK.

SWIFT'S BLACKSMITH TOOLS.

**SET
HAMMER.**
Fig. 2152.



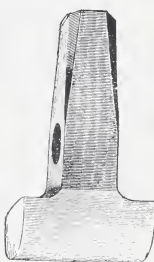
FLATTERS.
Square.
Fig. 2153.



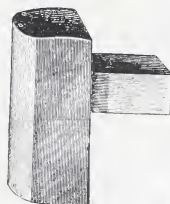
Round.
Fig. 2154.



FULLERS.
Top.
Fig. 2155.



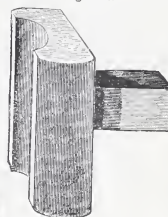
Bottom.
Fig. 2156.



SWAGES.
Top.
Fig. 2157.



Bottom.
Fig. 2158.



PUNCH.
Square or Round
Fig. 2159.



CUPPING TOOL.
Fig. 2160.



BUTTON SETS.
Fig. 2161.



COUNTERSINK.
Fig. 2162.



CREASER.
Fig. 2163.



CHISELS.
Cold.
Fig. 2164.



Hot.
Fig. 2165.



HEADING TOOL.
Fig. 2166.



HARDIES.
Straight or Round Shanks.
Fig. 2167.



Fig. 2168.



WRITE FOR OUR SPECIAL LOW PRICES.

DONEGAN AND SWIFT,
6 MURRAY STREET,
NEW YORK.

Fig. No.	2152	2153 and 2154	2155 and 2156	2157 and 2158	2159	2160	2161	2162	2163	2164 and 2165	2166	2167 and 2168
Size, inches	1 to 2½	1 to 4½	¼ to 2½	¼ to 4½	¾ to 1	3 to 5 lbs.	3 to 5 lbs.	1 to 5 lbs.	about 1 lb.	1¼, 1½ and 1¾	¼ to 1	¾ to 1½ shanks
Price, per lb.	.42	.42	.42	.42	.42	.50	.75	.50	.42	.42	.42	.42

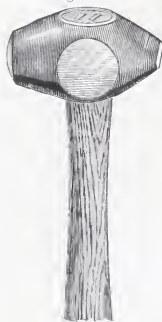
DONEGAN AND SWIFT, 6 MURRAY ST., NEW YORK.

SWIFT STEEL SLEDGES and HAMMERS.

FOR BLACKSMITH, HORSESHOER AND BOILERMAKER.

HAMMERS.

TURNING.
Fig. 2169.



ROUNDING.
Fig. 2170.



BALL PEIN.
Fig. 2171.



STRAIGHT PEIN.
Fig. 2172.



CROSS PEIN.
Fig. 2171.



HAND.
Fig. 2174.



DRIVING.
Fig. 2173.



SLEDGES.

Fig. 2176.

CROSS PEIN.



Fig. 2177.

STRAIGHT PEIN.



DOUBLE FACE.
Fig. 2178.



Fig. 2179.

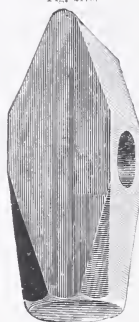
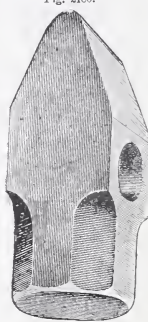


Fig. 2180.



HAMMERS. . . . H A N D .

NAPPING.
Fig. 2181.



BOILERMAKER.
Fig. 2182.



BRIDGE
BUILDER.
Fig. 2183.



Fig. No.	2169 and 2170				2171, 2172 and 2173				2174				2175	2176	2177	2178	2179	2180	2181	2182	2183
Weight, without Handles	2 to 3 lbs.				4 to 13 cz.	1 lb.	1½ lb.	1¾ lb.	2 lb.	2½ lb.	3 lb.	18 oz.	2 lb.	3 lb.	4½ lb.	7 oz.					
Price, per lb., 3 to 5 lbs.																					
Price, per dozen	\$30.00				12.00	12.50	14.50	15.50	16.50	19.00	22.00	12.00	14.00	16.00	19.00	7.50					

DONEGAN AND SWIFT, 6 MURRAY ST., NEW YORK.

SWIFT'S ANVIL, SWAGE BLOCK AND CONE, FOR BLACKSMITH AND WHEELWRIGHT.

CAST IRON, STEEL FACE, HARDENED ANVILS.

Fig. 2184. Style V.

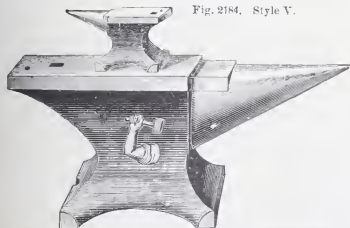
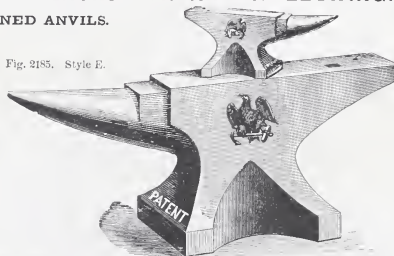
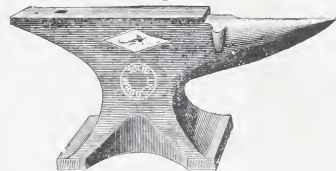


Fig. 2185. Style E.



WROUGHT IRON, STEEL FACE, HARDENED ANVIL.

Fig. 2186.



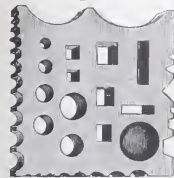
Weight.....	Lbs.	8	10
Fig. 2184.....	Price	\$2.75	3.25
Fig. 2185.....	Price	\$3.50	
Fig. 2186.....	Price	\$4.50	

20	30	40	50	60	70	80	90	100	110	120	130
4.00	4.50	5.25	6.00	6.75	7.50	8.25	9.00	9.75	10.50	11.25	12.00
4.00	4.50	5.25	6.00	6.75	7.50	8.25	9.00	9.75	10.50	11.25	12.00
5.00	5.50	6.25	7.00	7.75	8.50	9.25	10.00	10.75	11.50	12.25	13.00

140	150	160	175	200	250	300	350	400	500
80 to 300 lbs.,	10 cents	per lb.							
100 to 800 lbs.,	9 cents	per lb.							
60 to 500 lbs.,	15 cents	per lb.							

SWAGE BLOCK OR SOW.

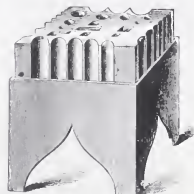
Fig. 2187.



Weight from 100 to 500 lbs., price per lb. 4 cents.

SWAGE BLOCK WITH STAND.

Fig. 2188.

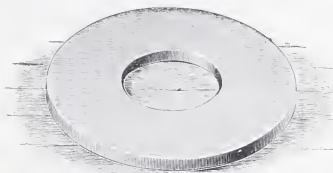


Weight about 300 lbs., price per lb. 4½ cents.

TIRE SETTING PLATE.

DISHED OR FLAT FORM.

Fig. 2189.



Plain.
Fig. 2190.



CONE OR MANDREL.

With Slot.

Fig. 2191.



Mounted on Base—

One Flat Side.

Fig. 2192.



SWAGE BLOCK.

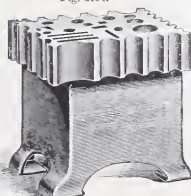
Fig. 2193.



Price List and Sizes.

BLOCK AND STAND CAST IN ONE PIECE.

Fig. 2194.



Outside Diameter.	Diameter of Hole.	Price.
5 foot	30 in.	\$30.00
5 "	20 "	25.00
5 "	16 "	25.00
5 "	12 "	25.00
5 " 6 in.	30 "	30.00
5 " 6 "	20 "	25.00
5 " 6 "	16 "	25.00

Write for our Special Low Prices.

DONEGAN AND SWIFT,

6 Murray Street,

New York.

	Not planed.	Planed both sides.		
Fig. 2193—18x18x4	\$11.00	\$13.00	18x18x4x16 high.	\$15.50
Fig. 2193A—15x15x4	7.00	8.50	15x15x4x16 "	12.00
Fig. 2193B—11x11x4	4.00	5.00	11x11x4x16 "	7.25

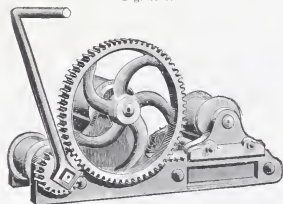
Size of Base.	Height.	Fig. 2190.	Fig. 2191.	Fig. 2192.
10 inches.	36 inches.	\$5.00	\$5.50	\$6.00
10 "	46 "	6.75	7.25	7.75
12 "	48 "	10.00	10.50	11.00
16 "	62 "	15.00	15.50	16.00

DONEGAN AND SWIFT, 6 MURRAY STREET, NEW YORK.

SWIFT'S TIRE BENDER, FOR BLACKSMITH AND WHEELWRIGHT.

GEAR AND PINION. TURNED ROLL.

Fig. 2195.



WRITE FOR OUR SPECIAL LOW PRICES.

DONEGAN AND SWIFT,

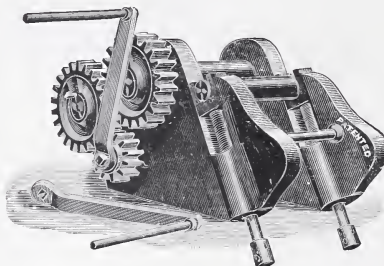
6 MURRAY STREET, NEW YORK.

ADJUSTMENT SCREWS AT EACH END OF ADJUSTING ROLL, WITH A GRADUATED INDICATOR ON EACH SIDE OF FRAME.

Fig. 2196.

DOUBLE BACK GEAR, WITH 2 CRANKS.

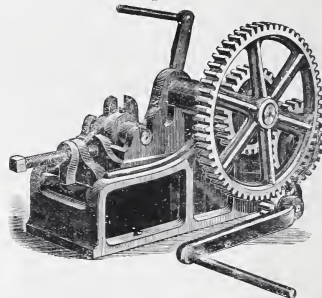
Fig. 2196.



HAS TWO COLLARS TO KEEP THE TIRE FROM TWISTING.

Will Bend Fifth Wheel.

Fig. 2197.



INCLINED BENDER.

TWO SPEEDS—FAST AND SLOW.

Set up ready for Bending.

Fig. 2199.

Rolls and Gear removed, showing working parts.

Fig. 2200.

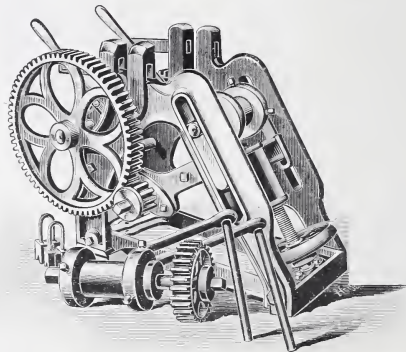
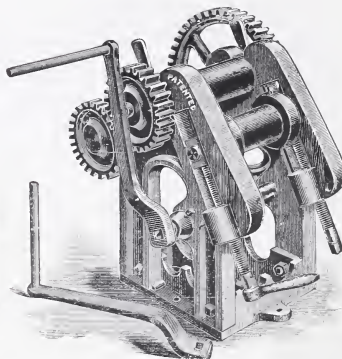
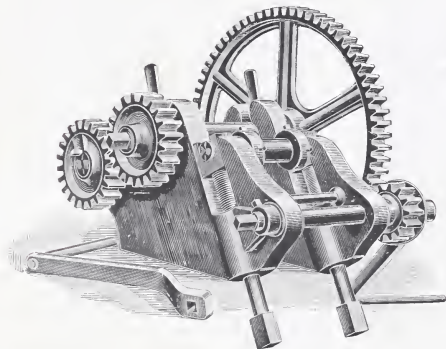


Figure No.

Will Bend Tire Up, inches

Weight, lbs

Price

2195

31 1/4 x 1

\$7.00

2196

3 x 3 1/4

11.00

2197

4 x 1

18.00

2198

6 x 1

25.00

2199

3 x 1

18.00

2199

6 x 1

25.00

2199

3 x 1

24.00

2199

3 x 1

30.00

2199

4 x 1

34.00

2199

6 x 1

40.00

2200

5 x 1

40.00

2200

6 x 1

50.00

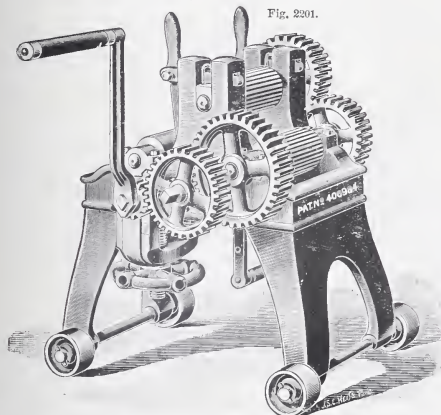
DONEGAN AND SWIFT, 6 MURRAY ST., NEW YORK.

SWIFT'S TIRE BENDER AND SHRINKER,

FOR BLACKSMITH AND WAGON MAKER.

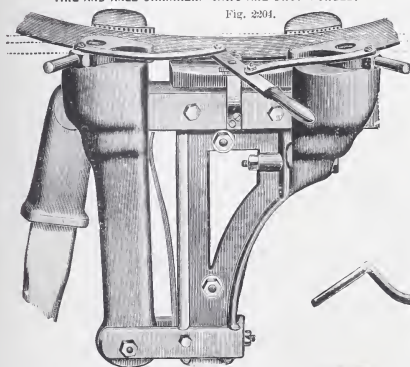
HAND AND POWER BENDER ON WHEELS. TWO SPEEDS, FOR LIGHT AND HEAVY WORK.
Rolls, 4 inches in Diameter.

Fig. 2201.



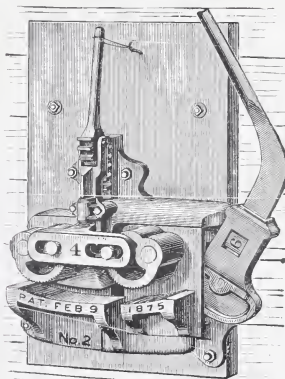
TIRE AND AXLE SHRINKER. JAWS ARE DROP FORGED.

Fig. 2204.



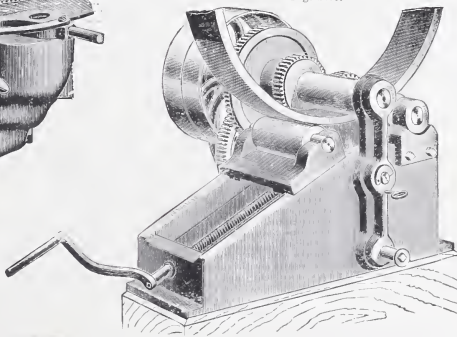
TIRE SHRINKER.
To Fasten to Post.

Fig. 2202.



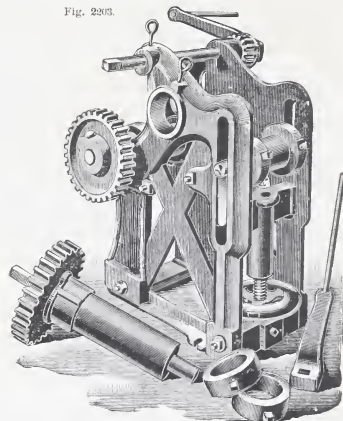
BENDER, FOR HEAVY WORK. HAS OPEN SIDE. TIRES CAN BE
TAKEN OUT WITHOUT SPRINGING.

Fig. 2205.



BENDER, FOR HEAVY WORK. HAS HEAVY WEBBED BRACES.
Built in 4 Sizes.

Fig. 2203.



WRITE FOR OUR
SPECIAL
LOW PRICES.

DONEGAN
and
SWIFT,
6 Murray St.,
NEW YORK.

TIRE SETTER AND AXLE
UPSETTER AND WELD-
ING MACHINE.

Built in 2 Sizes.

Fig. 2206.

Size No. 1. Upsets or
welds tire from $\frac{3}{4}$
to 5x1 $\frac{1}{4}$ inches; up-
sets or welds axles,
 $\frac{3}{4}$ to 2 $\frac{1}{2}$ inches; up-
sets with one revo-
lution, 2 inches;
weight 900 lbs.\$100
Size No. 2. Upsets or
welds tire from $\frac{3}{4}$
to 7x1 $\frac{1}{2}$ inches; up-
sets or welds axles,
 $\frac{3}{4}$ to 3 $\frac{1}{2}$ inches; up-
sets with one revo-
lution, 2 inches;
weight 1,300 lbs.\$125

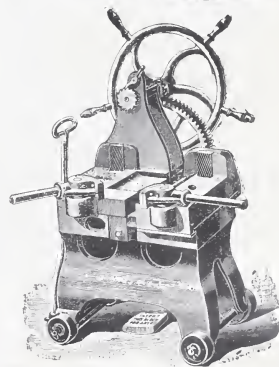


Figure No.	2201	2202	2203	2204	2205
Will Bend Tires, Inches	6x1 $\frac{1}{4}$	3x $\frac{3}{4}$	3x1	4x1	6x1
Will Shrink Tires, Inches	3	4	4x1	3x $\frac{3}{4}$	5x3 $\frac{1}{4}$
Weight, Lbs.	850	200	200	250	500
Price	\$80.00	12.00 17.50	15.00 17.00	20.00 25.00	34.00 45.00 100.00

DONEGAN AND SWIFT, 6 MURRAY STREET, NEW YORK.

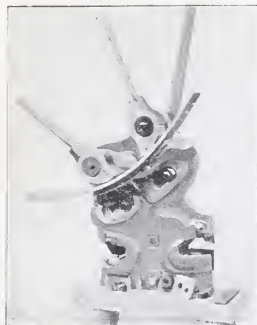
SWIFT'S FOOT AND POWER HAMMER AND TIRE SETTER.

FOR BLACKSMITH AND WHEELWRIGHT.

UPSET, PUNCH AND SHEARS

Combined.

Fig. 227.



Will upset any wagon tire up to 4 inches wide.

Upsets axles or any kind of iron from $\frac{3}{4}$ to 1 inch thick.

Will punch iron $\frac{3}{4}$ inch thick and $\frac{3}{4}$ inch holes in boiler plate 5-16 inch thick.

Will cut $\frac{3}{4}$ inch square and 1 inch round iron and 3 x 1 flat iron.

Machines complete have stand, four Punches, Die and Forged Steel Lever. Weight, 525 lbs.

Price, \$52.50.



**GRADUATED
TIRE WHEEL.**

Fig. 223.

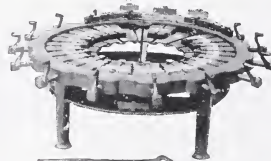
A tool for measuring lengths of tires accurately. The pointer is held in place by friction, so that it can be set instantly, and will not get loose.

Graduated, \$1.50
Plain, 1.25

HAND POWER TIRE SETTER.

Sets Tire Old or New.

Fig. 2208.



Will set tire on wheel 22 to 56 inches diameter. By turning wheel double width may be set, but thickness should be reduced one-half.

CAPACITY.

SIZE TIRE WILL SET.		
Smallest to.....	$\frac{3}{4}$ inch x 2 inch	
" " " " " "	$\frac{3}{4}$ inch x $2\frac{1}{2}$ inch	
" " " " " "	$\frac{3}{4}$ inch x 3 inch	
WEIGHT. PRICE.		
3,400 lbs.....		\$160.00
4,300 " " " " " "		200.00
5,000 " " " " " "		230.00

AXLE BOX PRESS

For Putting in and Taking out Axle Boxes by Screw Pressure

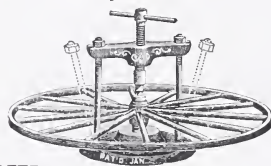


Fig. 2212.

Is operated by one man, and is capable of exerting a pressure of 12 tons. Size No. 1 works $\frac{1}{2}$ to $\frac{3}{4}$ inch axle boxes. No. 2, $\frac{3}{4}$ to all wagon axle boxes.

Size 1..... Weight, 60 lbs.

Price, \$18.00.

Size 2..... Weight, 90 lbs.

Price, \$35.00.

FOOT POWER HAMMERS FOR MAKING LIGHT FORGINGS AND WELDING WORK OF ALL KINDS.

Fig. 2209.

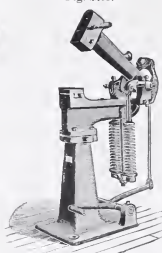
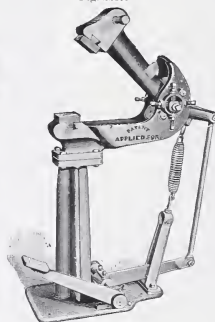


Fig. 2210.



One pair of plain Dies with Keys fitted go with each Hammer.

	Fig. No. 2209.	2210.
Welds iron up to inches.....	$\frac{1}{2}$ x 2	$\frac{3}{4}$ x $1\frac{1}{2}$
Weight, 1 s.....	325	500
Price.....	\$60.00	\$52.50

NUT WRENCH FOR BIT BRACE USE.

Fig. 2214.



For putting on and taking off nuts in carriage work. For tapping nuts, etc.

Set of wrenches for five nuts, $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$, 1, 1-16, 1-8, 7-16, and $\frac{1}{2}$ inch. Price, \$0.50

Fig. 2211.

BELT POWER HAMMER FOR CARRIAGE FORGING And Novelty Works.



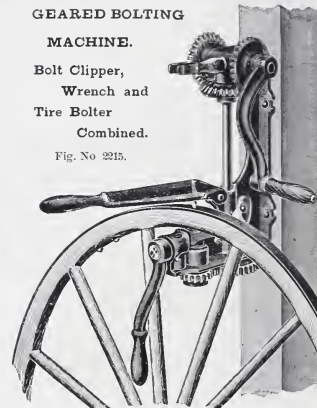
This Hammer has a 10-inch Crank Disk to throw from 0 to 7 inches, has Steel Bearings and Composition Boxes. Speed can be regulated from 75 to 400 strokes per minute, will work stock two inches square to light forgings: weight of Head and Slides, 50 lbs.; Anvil, 35 lbs., complete, 1,400 lbs.

Price, \$150.00.

GEARED BOLTING MACHINE.

Bolt Clipper,
Wrench and
Tire Bolter
Combined.

Fig. No. 2215.



Will remove Burrs, run them on or clip off the ends of tire bolts. Will fit any size tap. Complete with three sizes of Wrenches or Hollow Chucks— $\frac{1}{4}$, $\frac{1}{2}$ and $\frac{3}{4}$ inches.

Price, \$10.00.

Write for our Special Low Prices.

DONEGAN AND SWIFT, No. 6 MURRAY STREET, NEW YORK.

SWIFT'S STEAM AND BELT POWER HAMMERS,

FOR FORGING AND BLACKSMITH'S WORK.

AIR CUSHION, BELT
POWER.

Fig. 2217.

STRAP-CUSHIONED HELVE WITH
ADJUSTABLE ANVIL BLOCK
BELT POWER.

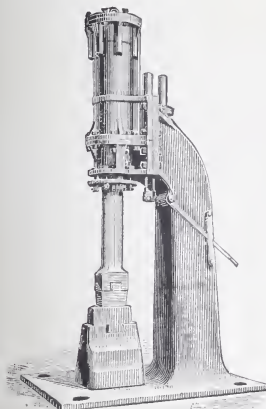
Fig. 2218.

BELT POWER WITH
SPRING CUSHION.

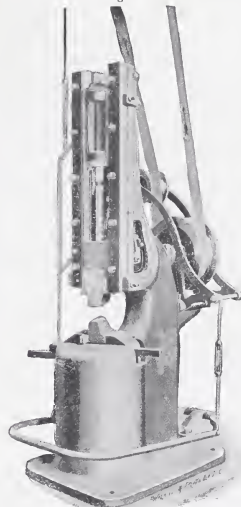
Fig. 2219.

STEAM POWER.

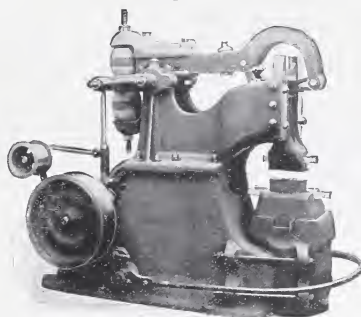
Fig. 2216.



This hammer is very useful in ordinary blacksmithing. Capacity of hammer 12 inches diameter down. Is easily controlled and can be used to strike up or drop any special pieces adapted to the different sizes.



This hammer receives its movement from the motion of the cylinder, which is connected by the connecting rod to the face plate on the end of the shaft.

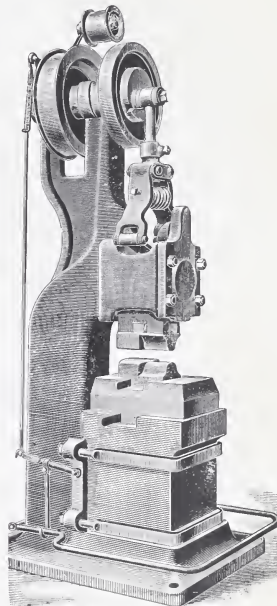


The head of ram works vertical in guides and is held by a continuous strap of leather suspended from spool-shaped bearings between the two parts of the steel helve. Rubber cushion at rear of helve absorbs all shock or jar.

WRITE FOR OUR SPECIAL LOW PRICES.

DONEGAN AND SWIFT,

6 Murray Street, - New York.



This hammer is operated by adjustable crank. The crank pin sliding in a groove in the crank plate. This permits the operator to lengthen or shorten the stroke.

Figure No.	2216			2217			2218			2219		
Weight of Ram, Lbs.	250	500	1000	25	50	80	100	15	30	50	75	100
Diameter of Driving Pulley, Inches	12	12	12	3	5	3 1/2	7	8	12	14	14	18
Width of Belt, Inches	120	120	120	300	250	200	180	3	3	4	4	6
Average Number of Blows Per Minute	6	8	12	1 1/4	1 1/2	2	1-3	1-4	1 1/4	1 1/2	1 3/4	2
Will Work Iron or Steel, Inches	6	8	12	1 1/4	1 1/2	2	1-3	1-4	1 1/4	1 1/2	1 3/4	2
Horse Power Required	60	80	100	1 1/2	1 1/2	3	5	1 1/2	2	3	4	5
Weight, Lbs.	5000	8000	20000	1500	3700	6000	7500	800	2400	3100	3200	4600
Price	\$850	\$850	\$1350	\$300	\$450	\$575	\$725	\$200	\$300	\$450	\$600	\$850

DONEGAN AND SWIFT, - 6 Murray Street, New York.

SWIFT'S GRINDSTONE AND FRAME.

SHIP GRINDSTONE AND FRAME.

Fig. 2221.



GRINDSTONES.

Fig. 2220.



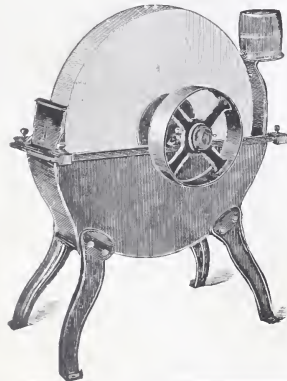
PRICE
PER LB.

Amherst, Ohio	.02 1/4
Independence, Ohio	
Berea, Ohio	
Nova Scotia,	.03
Newcastle, England	

IRON FRAMES WITH STONE.

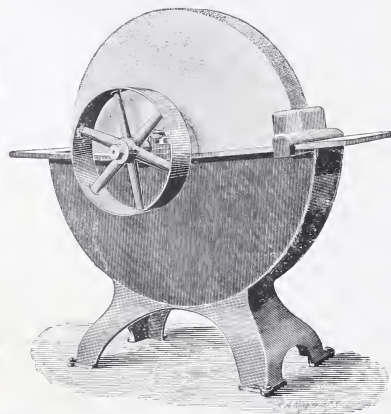
With Tool Rest, Shield, Water Pot
and Pulley.

Fig. 2225.



With Tool Rest, Shield and Pulley.

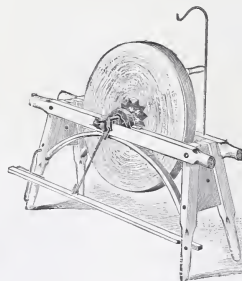
Fig. 2226.



WOOD FRAMES WITH STONE.

With Treadle, Crank and Hook for
Water Pot.

Fig. 2222.



With Shield, Treadle, Crank
and Water Trough.

Fig. 2223.



GRINDSTONE, BALL-BEARING.

With Seat and Treadle for
Foot Power.

Fig. 2224.



Diameter of Stone 22 x 2
inches. Price \$6.00.

WRITE FOR OUR SPECIAL LOW PRICES.

DONEGAN AND SWIFT, 6 Murray Street, New York.

FIG. 2221.

SIZE OF STONE	PRICE
6 inches	\$.75
7 "	.00
8 "	1.25
9 "	1.50
10 "	2.00
12 "	2.50

FIG. 2222 AND 2223.

WITH STONE WEIGH- ING ABOUT	PRICE FIG. 2222	PRICE FIG. 2223
50 pounds	\$4.20	\$5.50
60 "		5.75
80 "	\$4.50	6.25
100 "	5.00	7.00
120 "		7.50
140 "		8.00
160 "		9.00

FIG. 2225 AND 2226.

SIZE OF STONE	PRICE COMPLETE WITH STONE FIG. 2225	FIG. 2226
24x24 1/2 inches	\$21.50	
24x3 "	\$18.00	22.00
24x4 "		23.50
36x4 "	\$32.00	
36x3 "		\$42.50
36x4 "		44.00
36x5 "		45.00
36x6 "	\$50.00	

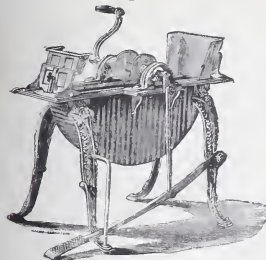
DONEGAN AND SWIFT, 6 MURRAY STREET, NEW YORK.

SWIFT'S GRINDSTONE FRAME AND ARBOR.

GRINDSTONE FRAMES, IRON.

With Shield, Tool Rest, Crank and Treadle for Hand and Foot Power.

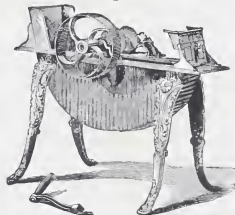
Fig. 2227.



Will swing stone $30 \times 4\frac{1}{2}$ ins.
Price \$12.00.

With Shield, Tool Rest, and Pulley for Power.

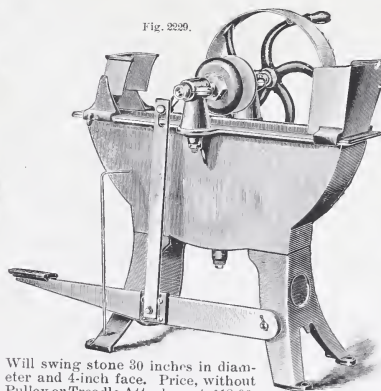
Fig. 2228.



With Pulley for Power, to swing Stone $30 \times 4\frac{1}{2}$ ins. \$15.00
With Pulley and Treadle for Power and Foot..... 16.00
With Pulley for Power to swing Stone 48×6 ins.... 50.00

With Water Guard, Adjustable Tool Rest, Treadle and Crank for Hand or Foot Power.

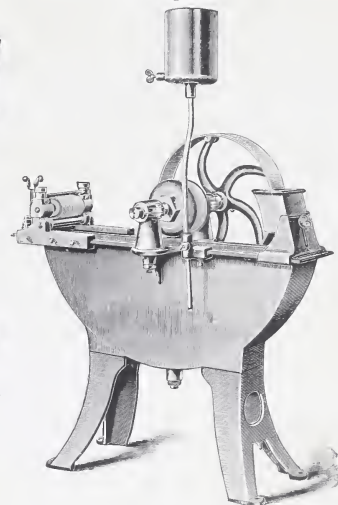
Fig. 2229.



Will swing stone 30 inches in diameter and 4-inch face. Price, without Pulley or Treadle Attachment, \$18.00.
Pulley, extra, \$1.50. Treadle, \$1.50.

With Adjustable Tool Rest, Truing Attachment, Water Pot, Shield, and Pulley for Power.

Fig. 2230.



Will swing stone 42 inches diameter, 6 inch face. Pulley 30 inches. Price \$50.00.

GRINDSTONE FRAMES, IRON, WITH STONE.

Has Shield, Tool Rest, Water Pot, and Treadle for Right or Left Foot.

With Tool-Rest, Shield, Water Pot and Pulley for Power.

Fig. 2231.

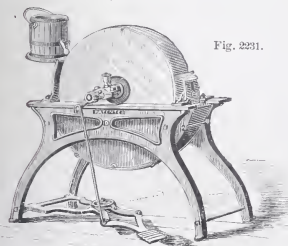
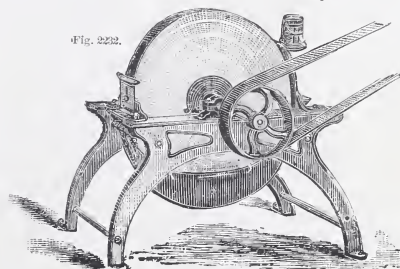
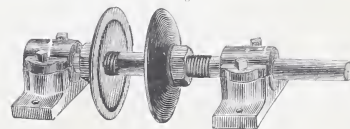


Fig. 2232.



STEEL GRINDSTONE ARBOR.

Fig. 2233.



Size No.	0	1	2	3	4	5
Size of Stone	$24 \times 2\frac{1}{2}$	24×3	$27 \times 3\frac{1}{2}$	30×4	36×5	48×8
Price	\$5.00	5.50	6.00	7.00	8.50	20.00

Figure No.	2231	2232	2233	2234	2235	2236	2237
Size of Stone	$24 \times 2\frac{1}{2}$	$24 \times 3\frac{1}{2}$	24×3	$27 \times 3\frac{1}{2}$	30×4	36×5	48×8
Price, without Stone	\$12.00	13.50	13.00	18.50	22.00	35.00	65.00
" with Stone	14.00	15.50	15.00	22.00	26.00	40.00	70.00

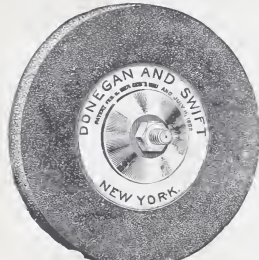
DONEGAN AND SWIFT, 6 MURRAY ST., NEW YORK.

SWIFT'S EMERY, VITRIFIED AND CORUNDUM WHEELS

FOR IRON WORKER AND MACHINIST.

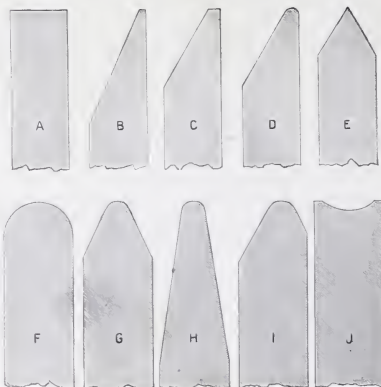
STANDARD WHEEL.

Fig. 2284.



SHAPES OF REGULAR WHEELS.

Fig. 2285.



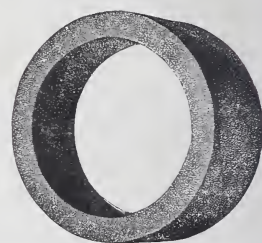
CUP WHEEL.

Fig. 2286.



CYLINDER WHEEL.

Fig. 2287.



The outside and inside diameter of these wheels remain the same, the grinding is done from edge of wheel. Holders are furnished for wheels. Price made by giving outside and inside diameter of wheel and depth of rim.

PRICE LIST OF REGULAR WHEELS.

Diam'r in Inches	THICKNESS OF WHEELS IN INCHES.														Revolutions per Minute
	1-2	3-4	1	1-1	1-1	1-2	1-3	2	2-1	2-1	2-2	2-3	4	3	
1	8	30	\$ 35	\$ 40	\$ 45	\$ 50	\$ 55	\$ 60	\$ 65	\$ 70	\$ 75	\$ 80	\$ 85	\$ 90	13,000
1 1/2	40	45	50	55	60	65	70	75	80	85	90	95	100	105	7,900
2	50	55	60	65	70	75	80	85	90	95	100	105	110	115	6,330
2 1/2	65	70	75	80	85	90	95	100	105	110	115	120	125	130	5,275
3	80	85	90	95	100	105	110	115	120	125	130	135	140	145	4,500
3 1/2	95	100	105	110	115	120	125	130	135	140	145	150	155	160	3,950
4	110	115	120	125	130	135	140	145	150	155	160	165	170	175	3,500
4 1/2	125	130	135	140	145	150	155	160	165	170	175	180	185	190	3,100
5	140	145	150	155	160	165	170	175	180	185	190	195	200	205	2,800
5 1/2	155	160	165	170	175	180	185	190	195	200	205	210	215	220	2,600
6	170	175	180	185	190	195	200	205	210	215	220	225	230	235	2,400
6 1/2	185	190	195	200	205	210	215	220	225	230	235	240	245	250	2,200
7	200	205	210	215	220	225	230	235	240	245	250	255	260	265	2,000
7 1/2	215	220	225	230	235	240	245	250	255	260	265	270	275	280	1,800
8	230	235	240	245	250	255	260	265	270	275	280	285	290	295	1,600
8 1/2	245	250	255	260	265	270	275	280	285	290	295	300	305	310	1,400
9	260	265	270	275	280	285	290	295	300	305	310	315	320	325	1,200
9 1/2	275	280	285	290	295	300	305	310	315	320	325	330	335	340	1,000
10	290	295	300	305	310	315	320	325	330	335	340	345	350	355	900
10 1/2	305	310	315	320	325	330	335	340	345	350	355	360	365	370	800
11	320	325	330	335	340	345	350	355	360	365	370	375	380	385	700
11 1/2	335	340	345	350	355	360	365	370	375	380	385	390	395	400	600
12	350	355	360	365	370	375	380	385	390	395	400	405	410	415	500
12 1/2	365	370	375	380	385	390	395	400	405	410	415	420	425	430	400
13	380	385	390	395	400	405	410	415	420	425	430	435	440	445	300

WRITE FOR OUR SPECIAL LOW
...PRICES...

DONEGAN AND SWIFT,
6 Murray St., New York.

DIRECTIONS FOR ORDERING WHEELS.

To assist in ordering correctly, we have divided them into nine grades, viz:
Grade 1 is soft and suitable for grinding paper-cutting, planer and leather surface work, roll grinding, etc.
Grade 2 is for light tool grinding, saw grinning, and sharpening wood working tools generally; is a medium soft wheel, made of all the numbers of emery, running from No. 36 to 10.
Grade 3 is suitable for grinding moulding knives, mould boards to ploughs, surface grinding, etc.
Grade 4 is medium and suited to grinding machine shoe tools, twist drills, surface work, such as polishing the edges of stoves, and will do a greater variety of work than any other grade.
Grade 5 is for light castings in brass, malleable iron, etc. Is a fast cutting wheel.
Grade 6 is medium hard, and is adapted to grinding iron castings, malleable and wrought iron, soft steel, stove work and spruces and gates from castings.
Grade 7 is hard and adapted to grinding heavy iron castings, edge work, etc.
Grade 8 is very hard. This wheel is made especially for plow jointing and hard steel edge grinding; will not do surface work.
Grade 9 is made of the finer grades of emery, to be used where there is not much metal to be removed, and where the wheel is expected to retain a certain shape as in grinding flutes of taps, milling cutters, etc.

In ordering, state the following particulars:

The diameter, thickness, shape of face, diameter of hole in center; also the kind of work you wish to do with the wheel.

Diamond pointed tools for dressing emery wheel, grindstone and paper rolls. These tools are tipped with carbon or diamond points.

HAND TOOL.

Fig. 2288.



HAND AND LATHE TOOL, SINGLE END.

Fig. 2289.

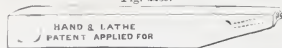


Fig. 2288. Common Point, \$ 5.00. \$12.00

Fig. 2289. " 7.00. 14.00

" 10.00. 16.00

" 15.00. 20.00

LATHE TOOL, ADJUSTABLE. DOUBLE ENDS.

Fig. 2290.



The diamond in this tool can be taken out and reset by any mechanic. C represents carbon point for dressing emery wheels and grindstones. D represents single end shaped diamond calendar point. Price with holder complete \$38.00. E represents double end, shaped calendar point. Can be reversed when one end becomes dull. Price with holder, \$53.00.

DONEGAN AND SWIFT, 6 MURRAY STREET, NEW YORK.